

# NAVAL POSTGRADUATE SCHOOL MONTEREY, CALIFORNIA



## THESIS

**DEVELOPMENT OF AN ACTIVITY-BASED COSTING  
MODEL FOR IMPLEMENTING CAPITATION AT  
NAVAL MEDICAL CENTER SAN DIEGO**

by

Ives C. Jones

December, 1996

Principal Advisor:  
Associate Advisor:

K. J. Euske  
Jim Kerber, USN

**Approved for public release; distribution is unlimited.**

19970411 022

DTIC QUALITY INSPECTED 1

| REPORT DOCUMENTATION PAGE  |  |   | Form Approved OMB No. 0704-0188  |  |
|--|--|---|----------------------------------|--|
| Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.  |  |   |                                  |  |
| 1. AGENCY USE ONLY (Leave blank)   | 2. REPORT DATE<br>12 Dec 96                              | 3. REPORT TYPE AND DATES COVERED<br>Master's Thesis     |                                  |  |
| 4. TITLE AND SUBTITLE DEVELOPMENT OF AN ACTIVITY-BASED COSTING MODEL FOR IMPLEMENTING CAPITATION AT NAVAL MEDICAL CENTER SAN DIEGO   |  | 5. FUNDING NUMBERS                                      |                                  |  |
| 6. AUTHOR(S) Ives C. Jones, LT, MSC, USN   |  |   |                                  |  |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)<br>Naval Postgraduate School<br>Monterey CA 93943-5000  |  | 8. PERFORMING ORGANIZATION REPORT NUMBER                |                                  |  |
| 9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)  |  | 10. SPONSORING/MONITORING AGENCY REPORT NUMBER          |                                  |  |
| 11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.   |  |   |                                  |  |
| 12a. DISTRIBUTION/AVAILABILITY STATEMENT<br>Approved for public release; distribution is unlimited.  |  |   | 12b. DISTRIBUTION CODE           |  |
| 13. ABSTRACT (maximum 200 words)<br><p>The purpose of this research is to develop a financial model for Naval Medical Center San Diego for the calculation of an appropriate capitation rate under capitation budgeting. The current cost accounting system at Naval Medical Center San Diego and records of the Military Expense and Reporting System and the Uniform Management Report were analyzed to determine their usefulness in providing the information for and implementing capitation budgeting. An accounting model based on the principles of activity-based costing was used to develop a financial model and was applied to the current accounting system at Naval Medical Center San Diego.</p> <p>The research showed the current accounting system used at Naval Medical Center San Diego and the Military Expense and Reporting System and the Uniform Management Report do not provide the needed financial information for the calculation of an appropriate capitation rate. The accounting system will need to be realigned to identify expenses by activities versus cost categories. The analysis done for this thesis indicates that activity-based costing can provide a more accurate measure of the cost of services (outputs) and facilitate in the calculation of an appropriate capitation rate for Naval Medical Center San Diego.</p> |  |   |                                  |  |
| 14. SUBJECT TERMS Capitation Budgeting, Activity-based Costing   |  |   | 15. NUMBER OF PAGES 126          |  |
|  |  |   | 16. PRICE CODE                   |  |
| 17. SECURITY CLASSIFICATION OF REPORT<br>Unclassified  | 18. SECURITY CLASSIFICATION OF THIS PAGE<br>Unclassified | 19. SECURITY CLASSIFICATION OF ABSTRACT<br>Unclassified | 20. LIMITATION OF ABSTRACT<br>UL |  |



Approved for public release; distribution is unlimited.

**DEVELOPMENT OF AN ACTIVITY-BASED COSTING MODEL  
FOR IMPLEMENTING CAPITATION AT  
NAVAL MEDICAL CENTER SAN DIEGO**

Ives C. Jones  
Lieutenant, United States Navy  
M.P.H., University of Oklahoma, 1987

Submitted in partial fulfillment  
of the requirements for the degree of


**MASTER OF SCIENCE IN MANAGEMENT**

from the

**NAVAL POSTGRADUATE SCHOOL**

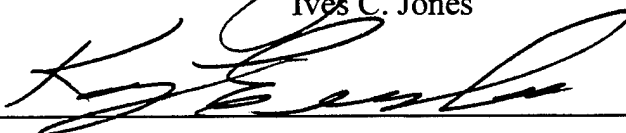
**December 1996**

Author:



Ives C. Jones

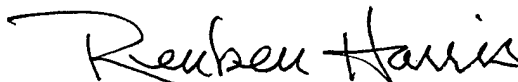
Approved by:



K. J. Euske, Thesis Advisor



Jim Kerber, Associate Advisor



Reuben Harris, Chairman, Department of Systems Management



## **ABSTRACT**

The purpose of this research is to develop a financial model for Naval Medical Center San Diego for the calculation of an appropriate capitation rate under capitation budgeting. The current cost accounting system at Naval Medical Center San Diego and records of the Military Expense and Reporting System and the Uniform Management Report were analyzed to determine their usefulness in providing the information for and implementing capitation budgeting. An accounting model based on the principles of activity-based costing was used to develop a financial model and was applied to the current accounting system at Naval Medical Center San Diego.

The research showed the current accounting system used at Naval Medical Center San Diego and the Military Expense and Reporting System and the Uniform Management Report do not provide the needed financial information for the calculation of an appropriate capitation rate. The accounting system will need to be realigned to identify expenses by activities versus cost categories. The analysis done for this thesis indicates that activity-based costing can provide a more accurate measure of the cost of services (outputs) and facilitate in the calculation of an appropriate capitation rate for Naval Medical Center San Diego.



## TABLE OF CONTENTS

|  |    |
|--|----|
| I. INTRODUCTION .....                  | 1  |
| A.    PURPOSE OF RESEARCH .....        | 1  |
| B.    THE PROBLEM .....                | 2  |
| C.    THE RESEARCH QUESTIONS .....     | 3  |
| D.    SCOPE AND LIMITATIONS .....      | 3  |
| E.    PREVIEW OF CHAPTERS .....        | 4  |
| II. CAPITATION .....                   | 5  |
| A.    INTRODUCTION .....               | 5  |
| B.    ELEMENTS OF CAPITATION .....     | 6  |
| 1.    Defined population .....         | 6  |
| 2.    Fixed payment .....              | 6  |
| 3.    Financial risk .....             | 6  |
| C.    DOD CAPITATION MODEL .....       | 7  |
| 1.    Category I (CAT I) .....         | 9  |
| 2.    Category II (CAT II) .....       | 10 |
| 3.    Category III (CAT III) .....     | 11 |
| D.    NAVY FY97 CAPITATION MODEL ..... | 12 |
| E.    SUMMARY .....                    | 16 |



|   |    |
|---|----|
| III. ACTIVITY-BASED COSTING .....                               | 17 |
| A. INTRODUCTION .....   | 17 |
| B. ABC AS A MANAGEMENT TOOL .....                               | 17 |
| 1. Activities are action .....                                  | 17 |
| 2. Activities drive cost .....                                  | 18 |
| 3. Compatible with total quality management .....               | 18 |
| 4. Improves decision support .....                              | 19 |
| C. ACTIVITY-BASED COSTING VS. TRADITIONAL COST<br>SYSTEMS ..... | 20 |
| 1. Cost pools defined in terms of activities .....              | 20 |
| 2. Structurally different allocation bases .....                | 22 |
| D. ESSENTIAL FACTORS IN ACTIVITY-BASED COSTING .....            | 23 |
| 1. Activity analysis .....                                      | 23 |
| 2. Trace resources to activities .....                          | 23 |
| 3. Identify outputs .....                                       | 24 |
| 4. Link activity costs to outputs .....                         | 25 |
| E. SUMMARY .....  | 25 |
| IV. MODEL DEVELOPMENT .....                                     | 27 |
| A. INTRODUCTION .....   | 27 |
| B. ACTIVITY ANALYSIS .....                                      | 27 |

|    |   |    |
|----|---|----|
| 1. | Activity analysis scope .....             | 29 |
| 2. | Activity analysis units .....             | 29 |
| 3. | Define activities .....                   | 30 |
| 4. | Rationalize activities .....              | 31 |
| 5. | Classify activities .....                 | 32 |
| 6. | Create activity map .....                 | 32 |
| 7. | Finalize activities .....                 | 33 |
| C. | ASSIGN RESOURCE COSTS TO ACTIVITIES ..... | 33 |
| 1. | Methods of assigning resource costs ..... | 34 |
| a. | Direct charging .....                     | 34 |
| b. | Estimation .....                          | 35 |
| c. | Arbitrary allocation .....                | 35 |
| 2. | Steps in assigning resource costs .....   | 35 |
| a. | Source of data .....                      | 36 |
| b. | Group related costs .....                 | 36 |
| c. | Establish causal relationship .....       | 37 |
| d. | Trace people-related costs .....          | 38 |
| e. | Trace all other costs .....               | 39 |
| D. | DEFINING THE OUTPUTS .....                | 39 |
| E. | LINK ACTIVITY COSTS TO OUTPUTS .....      | 40 |
| F. | SUMMARY .....                             | 41 |

|   |    |
|---|----|
| V. ACCOUNTING SYSTEM AT NAVAL MEDICAL CENTER SAN DIEGO .....          | 43 |
| A. INTRODUCTION .....   | 43 |
| B. CURRENT ACCOUNTING SYSTEM .....                                    | 43 |
| 1. Sub-Activity Group (SAG) .....                                     | 44 |
| 2. Functional/Sub-Functional Category (F/SFC) .....                   | 44 |
| 3. Cost account code (CAC) .....                                      | 45 |
| 4. Expense elements (EE) .....  | 46 |
| C. MILITARY EXPENSE AND PERFORMANCE REPORTING SYSTEM<br>(MEPRS) ..... | 46 |
| 1. MEPRS Code Structure .....   | 46 |
| a. Functional categories .....  | 47 |
| b. Summary accounts .....   | 48 |
| c. Subaccounts .....  | 48 |
| d. Special accounts .....   | 49 |
| 2. Data Collection .....  | 50 |
| a. Expense .....  | 51 |
| b. Workload .....   | 54 |
| c. Manpower .....   | 55 |
| D. UNIFORM MANAGEMENT REPORT (UMR) .....                              | 57 |
| 1. Cost/sub-cost Center Structure .....                               | 57 |

|  |   |    |
|--|---|----|
| 2.   | Data Collection .....                             | 59 |
| E.   | SUMMARY .....                                     | 60 |
| VI. APPLICATION OF THE MODEL TO THE ACCOUNTING SYSTEM AT NAVAL |   |    |
|  | MEDICAL CENTER SAN DIEGO .....                    | 63 |
| A.   | INTRODUCTION .....                                | 63 |
| B.   | ANALYSIS OF COST ACCUMULATION AND ALLOCATION .... | 63 |
| 1.   | Cost accumulation .....                           | 64 |
| 2.   | Cost allocation .....                             | 65 |
| C.   | APPLICATION OF ABC .....                          | 67 |
| 1.   | Activity analysis .....                           | 68 |
| 2.   | Assigning resource costs to activities .....      | 69 |
| 3.   | Defining outputs .....                            | 70 |
| 4.   | Assigning activity costs to outputs .....         | 70 |
| D.   | CONCLUSIONS AND RECOMMENDATIONS .....             | 71 |
| APPENDIX A. SAG CATEGORIES .....                               |   | 75 |
| APPENDIX B. F/SFC/ CODES .....                                 |   | 77 |
| APPENDIX C. COST ACCOUNTS AND WORK UNITS .....                 |   | 79 |

|  |     |
|--|-----|
| APPENDIX D. EXPENSE ELEMENTS .....                     | 99  |
| APPENDIX E. WORK CENTERS AND PERFORMANCE FACTORS ..... | 101 |
| APPENDIX F. NMCS D CC/SCC .....                        | 107 |
| LIST OF REFERENCES .....                               | 111 |
| INITIAL DISTRIBUTION LIST .....                        | 113 |

## **I. INTRODUCTION**

### **A. PURPOSE OF RESEARCH**

The purpose of this research is to develop a financial model for Naval Medical Center San Diego (NMCS D) to facilitate the tracking and accumulation of costs associated with providing healthcare services. A more accurate measure of healthcare costs would facilitate the determination of an appropriate capitation rate that could be used to allocate Defense Health Program (DHP) resources to NMCS D under capitation budgeting. Computation of individual capitation rates for each medical treatment facility (MTF) includes direct care<sup>1</sup> dollars, Civilian Health and Medical Program of the Uniformed Services (CHAMPUS<sup>2</sup>) costs, MILPERS dollars, and Managed Care contract costs (Martin, 1996). This research proposes to apply the principles of activity-based costing (ABC) in designing a financial model that would allow direct care costs to be measured more accurately than under the current system.

---

<sup>1</sup> The military health services system is made up of two parts: direct health care and CHAMPUS. Direct care is made up of MTFs operated by the Military Departments providing services to active-duty personnel, dependents of active-duty personnel, retirees and their dependents and survivors.

<sup>2</sup> Military healthcare program for non-active duty beneficiaries (under age 65) wherein they receive healthcare from the civilian sector when not available at the MTF. Cost is shared by the beneficiary with the military department through the auspices of the CHAMPUS program.

## **B. THE PROBLEM**

The military health services system (MHSS) is continuously faced with challenges in managing its resources and the rising cost of health care in an environment of continuing reductions in defense funding. The DOD Coordinated Care program has been developed by personnel from the Office of the Assistant Secretary of Defense for Health Affairs (OASD(HA)) to improve the MHSS by enhancing the quality of care, increasing accessibility, and containing costs (DOD Coord Care Proposal, 1991). Under Coordinated Care, OASD(HA) has planned for the Military Departments to use capitation budgeting as one of the strategies for containing costs while maintaining accessibility and high quality of healthcare services (DOD Coord Care Proposal, 1991).

Positioning the MHSS for capitation and to efficiently provide access to quality care will involve behavioral and structural changes as it transitions from a disease-based, workload measure to a capitation methodology (Office of the Assistant Secretary of Defense (Health Affairs), 1993A). To facilitate the transition, it is necessary to understand the method of costing the services performed by the MTF and the relation between costs and outputs. Utilizing ABC can provide information on how expenditures are accumulated and means to affect the cost of outputs. (Rotch, 1990)

The successful application of ABC by manufacturing organizations has lead to the investigation of its usefulness in the healthcare sector for providing an analytical framework to quantify costs and relationships (Rotch, 1990), and improved cost control and decision making

(Chan, 1993). This research uses ABC methodology to develop a financial model and investigate whether it will provide the same benefits for MTFs.

### **C. THE RESEARCH QUESTIONS**

There are two questions that this research attempted to answer with regard to determining the accuracy of NMCS D's accounting system in tracking and accumulating costs for the calculation of a capitation rate. First, what would be an effective and accurate costing system to support the objectives of the Navy capitation model and provide useful information to capture the total costs of healthcare? Second, does the accounting structure of NMCS D accurately capture costs and permit tracking of costs to services? If not, what alternative costing system would support such objectives?

This research addressed two additional questions to determine the usefulness of ABC for developing an alternative financial model for NMCS D to track and accumulate healthcare costs. First, what advantages does ABC provide in tracking and accumulating costs? Second, will ABC provide an appropriate measure for primary outputs at NMCS D that would accurately reflect its total cost per output within a capitation budget?

### **D. SCOPE AND LIMITATIONS**

The capitation-based resource allocation system for funding Navy MTFs was initiated by BUMED using full FY94 financial data and deployed for the first time in FY95. The inception



of Tricare<sup>3</sup> in the MHSS in FY96 introduces other factors that will affect allocation of CHAMPUS resources within a capitated system (Lamar, 1994).

A prototype accounting model for capitation-based resource allocation is developed and applied to NMCS D in Chapter VI. This is not intended to be a full working model and is an attempt at increasing the accuracy of capturing cost information at NMCS D for capitation budgeting.

## **E. PREVIEW OF CHAPTERS**

Chapter II is a discussion of the concept of capitation and presents both the DOD and Navy-specific capitation models. Chapter III describes the concept of activity-based costing (ABC). Chapter IV discusses the construction of a proposed ABC model as the basis for measuring the cost of providing healthcare at NMCS D. The findings of an analysis of the current cost accounting system at NMCS D are presented in Chapter V. Using the current cost accounting structure at NMCS D, Chapter VI discusses the applicability of the ABC model as an alternative to the current accounting system for appropriately tracking and accumulating healthcare costs.

---

<sup>3</sup> A DOD healthcare reform program designed to ensure the most effective execution of the military healthcare mission, ensure access to quality healthcare services, control healthcare costs, and respond to changes in military and national healthcare priorities.

## II. CAPITATION

### A. INTRODUCTION

The purpose of this chapter is to discuss the concept of capitation and its applications within the DOD and the Department of the Navy. This section begins by defining the elements of capitation followed by a presentation of current DOD guidelines that address the method of allocating DHP resources to the Military Departments for FY97. Finally, the Navy's catchment area<sup>4</sup> capitation budget model for FY97 is discussed.

Capitation is a population-based budgeting methodology wherein the responsibility to provide or assure delivery of an identified benefit structure to a defined population is assumed by the MTF commander in return for a fixed amount per beneficiary (Office of the Assistant Secretary of Defense (Health Affairs), 1993A). It is an effective means of containing costs because it places a cap on expenditures and eliminates the incentive for escalating budgets by increasing services or providing costly care. Additionally, the BUMED Comptroller stated that capitation holds MTF Commanders accountable for all resources, emphasizes outcome vs. volume, discourages inappropriate care, rewards efficient delivery of healthcare, and is sensitive to mission changes (population) (Martin, 1994).

---

<sup>4</sup> A catchment area defines a region surrounding an MTF that would determine its area of responsibility for providing healthcare. The Military Health Care Study Project Team in 1975 set a 40-mile limit inpatient boundary surrounding an MTF as its catchment area. Department of Defense and others, *Reports of the Military Health Care Study, Supplemental: Detailed Findings* (1975), p. 947.

## **B. ELEMENTS OF CAPITATION**

A capitation plan consists of the following three elements: 1) a defined population, 2) a fixed payment, and 3) an assumed financial risk. (CBO Study, 1988)

### **1. Defined population**

A defined population is an estimate of the number of eligible beneficiaries who would be relying on the MTF for healthcare. Establishing this population is one of the factors in determining how much healthcare an MTF will provide.

### **2. Fixed payment**

Under capitation, an MTF commander accepts the responsibility to provide a range of healthcare services to a defined population, in return for a fixed amount per beneficiary. The basis for the allocation of resources under a capitated budget is the fixed payment or capitation rate.

### **3. Financial risk**

A financial risk is assumed in part by an MTF commander under capitation budgeting (Office of the Assistant Secretary of Defense (Health Affairs), 1993A). Depending on the efficient use of resources, an MTF may breakeven, have a surplus or a deficit from providing healthcare to its beneficiaries within a capitation budget. In order for savings to be realized under capitation, services have to be provided effectively and efficiently, thereby increasing productivity and not generating workload from unnecessary care.

### **C. DOD CAPITATION MODEL**

Historical resource consumption and workload trends have been the basis for programming and budgeting in the Military Departments. This tradition rewards submission of budgets with increased workloads without holding the activity and its staff accountable for generating additional services. In an effort to improve the incentives facing healthcare personnel and contain healthcare costs, DOD adopted capitation budgeting. (Office of the Assistant Secretary of Defense (Health Affairs), 1993B)

Capitation addresses two issues which made it very attractive to DOD policymakers. First, it provides MTF commanders the proper incentives to efficiently provide care by increasing the performance of their MTFs and their use of scarce resources. Second, it supports the development and execution of a more predictable budget through a prospectively determined capitation rate. (Office of the Assistant Secretary of Defense (Health Affairs), 1993A)

The ASD(HA) expected this new budgeting system to discourage the provision of unnecessary care while ensuring increased accessibility and high quality of care (Office of the Assistant Secretary of Defense (Health Affairs), 1993B). Since the funds distributed to an MTF do not depend on the services used, there is no financial motivation to increase the number of services or to provide particularly costly care.

Capitation budgeting is not new to DOD. A trial project was executed in the late 1970's by the Military Departments as part of a movement to control healthcare costs. In a memorandum for the ASD(HA) in April 1993, the Surgeon General of the Navy, indicated some

policy concerns as a result of the trial project. One of these issues was the ability of the MTF commander to access, in real time, accurate and timely information on the quantity, composition, and cost of workload being performed in the catchment area. Another policy concern was the lack of a capitation rate setting mechanism that rewards effective performance. (Surgeon General of the Navy, 1993)

Most recently, DOD demonstration projects have shown that capitation budgeting promises to hold down military health care costs and can increase efficiency. This has been illustrated through the Army's Gateway to Care Program and the Navy's Catchment Area Management (CAM) projects, and indirectly through the CHAMPUS Reform Initiative (CRI). (Reischauer, 1993)

The initial program guidance for FY93/94 prompted OASD(HA) and the Services to develop an interim capitation methodology based on the experience gained from the Army's Gateway to Care Program capitation budgeting model used in FY92/93. The amount of the capitation budget in the Army's model was a product of historical cost per beneficiary served and the number of beneficiaries projected for the next fiscal year. The Army's Health Services Command reported that the use of its capitation-based resource allocation methodology created incentives for more efficient use of resources. (Office of the Assistant Secretary of Defense (Health Affairs), 1993A)

In FY93/94, personnel from OASD(HA) working with the Military Departments, developed an initial plan for a financial-based, capitation methodology for allocating DHP

resources to the Military Departments. Computation of a capitation rate was performed for unique military, medical-related functions identified to be funded within a capitation budget. (Office of the Assistant Secretary of Defense (Health Affairs), 1993B) A budgeting system based on this capitation model was implemented in FY94 and had been adjusted over the following years with a plan for full implementation by FY97. (Office of the Assistant Secretary of Defense (Health Affairs), 1993A)

The DOD Capitation approach is population driven and consists of three major categories: 1) CAT I - Military Medical Support, 2) CAT II - Military Medical Unique Capitation Rate, and 3) CAT III - Medical Capitated Cost. At a minimum, the Service-specific methodology takes account of Operation and Maintenance (O&M) Direct Care, O&M CHAMPUS, Military Personnel (MILPERS), and population (Office of the Assistant Secretary of Defense (Health Affairs), 1993B).

#### **1. Category I (CAT I)**

The first category is not calculated on a per capita basis and covers budgets for some fixed costs that relate to the military's unique medical infrastructure and services not directly related to size of the military force structure (Office of the Assistant Secretary of Defense (Health Affairs), 1993B; Reischauer, 1993). These functions are not conducive to population-based budgeting which prevents inclusion in a capitation rate (Office of the Assistant Secretary of Defense (Health Affairs), 1993B). Examples include the following: (Office of the Assistant Secretary of Defense (Health Affairs), 1993B)

- Armed Forces Institute of Pathology
- Contingency Bed Capacity
- Referrals from Overseas
- Aeromedical Evacuation System
- Medical Entrance Processing
- Environmental Restoration
- Overseas Activities
- Capital Expense Initial Outfitting

Funding for these functions is determined based on mission changes, realignments, base closings, inflation, and other adjustments considered in the budgeting process. This category contains O&M Direct Care and MILPERS funding (Office of the Assistant Secretary of Defense (Health Affairs), 1993B).

## **2. Category II (CAT II)**

CAT II incorporates budgets for variable costs that relate to the military's unique medical infrastructure and a capitation rate is calculated based on the active duty population (Office of the Assistant Secretary of Defense (Health Affairs), 1993B; Reischauer, 1993). This reflects the costs of military medical unique functions and readiness related to the size of the force structure and Service-specific military requirements. The costs for these items are adjusted for the

overseas portion which is included in CAT I. O&M Direct Care and MILPERS funding are also included (Office of the Assistant Secretary of Defense (Health Affairs), 1993B).

The second category is further divided into A and B. For CAT IIA a capitation rate is determined based on the local active duty population (e.g., dental care, optical laboratories) while for CAT IIB a capitation rate is determined based on the local medical population (e.g., readiness planning, education and training). (Martin, 1993) Examples of CAT II functions include: (Office of the Assistant Secretary of Defense (Health Affairs), 1993B)

- Readiness Planning
- Physiological Training Flights and Laboratories
- Dental Care
- Veterinary Services
- Optical Laboratories
- Military Funded Emergency Leave
- Readiness Exercises and Training
- Education and Training

### **3. Category III (CAT III)**

The third category includes medical healthcare services that are capitated based on the total number of beneficiaries, including active-duty and non-active-duty beneficiaries. This component is made up of budgets for costs that relate to the peacetime health care system and



services that are directly comparable to civilian healthcare. (Office of the Assistant Secretary of Defense (Health Affairs), 1993B; Reischauer, 1993) It contains O&M Direct Care, MILPERS, and O&M CHAMPUS funding associated with providing healthcare other than those included in the first and second categories (Office of the Assistant Secretary of Defense (Health Affairs), 1993B).

#### **D. NAVY FY97 CAPITATION MODEL**

The FY97 capitation budget was developed by BUMED personnel from data generated at the MTF level between April 1995 - March 1996. The data included direct O&M, MILPERS, CHAMPUS (if applicable), and managed care contract dollars (if applicable). (Martin, 1996)

The capitated rate for an MTF consists of patient care dollars (variable cost) and non-patient care dollars (fixed cost). Patient care dollars consist of expenses generated from providing patient care in the MTF and CHAMPUS dollars as indicated in Figure 2-1. Non-patient care dollars is made up the cost related to the infrastructure of the MTF and MILPERS dollars which is displayed in Figure 2-2. (Martin, 1996)

The calculation of the MTF FY97 capitated rate consists of computing the patient care cost, non-patient care cost, CHAMPUS cost, and managed support contract cost. Table 2-1 illustrates the methodology involved in these calculations. (Martin, 1996)

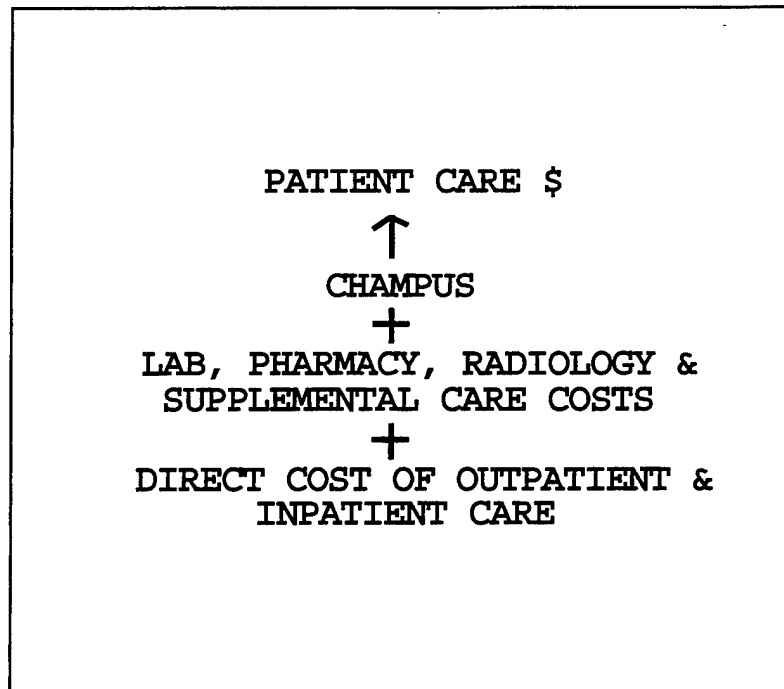


Figure 2-1 Patient Care Dollars

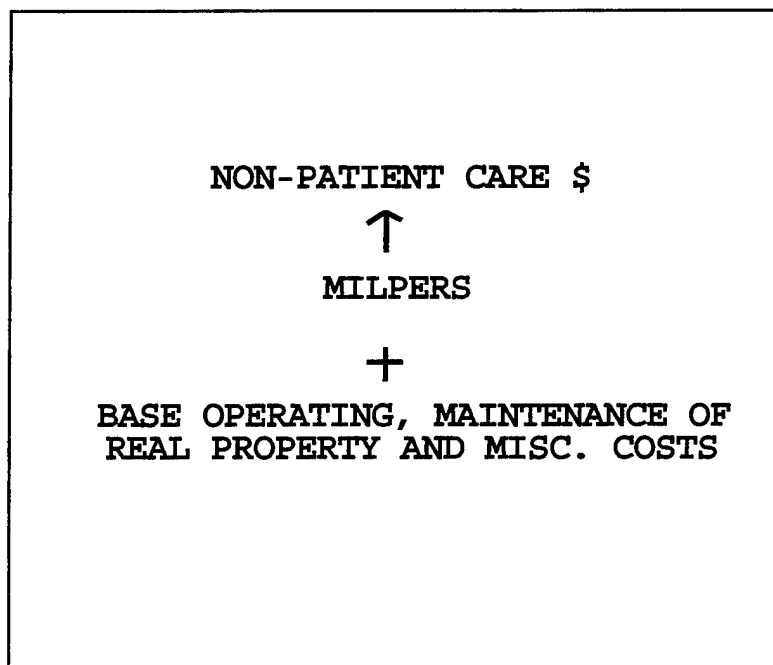


Figure 2-2 Non-Patient Care Dollars

**Table 2-1 Calculation of FY97 Capitated Rate**

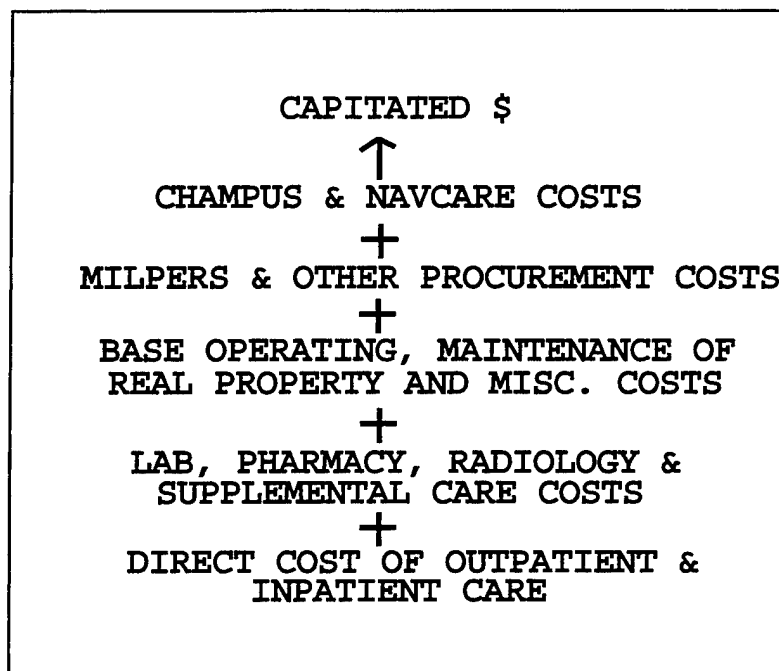
| <b>Patient Care (PC) Cost</b>              |  |
|--|--|
| STEP 1                                     | FY96 PC costs ÷ FY96 population = FY96 rate                            |
| STEP 2                                     | FY96 rate x FY97 population  |
| STEP 3                                     | Apply FY97 inflation rate  |
| <b>Non-Patient Care (NPC) Cost</b>         |  |
| STEP 1                                     | FY96 NPC costs - "One-Time" <sup>5</sup> costs                         |
| STEP 2                                     | Apply FY97 inflation rate  |
| STEP 3                                     | Add/subtract functional transfers, mission changes, and one-time costs |
| <b>CHAMPUS Cost</b>                        |  |
| STEP 1                                     | FY96 CHAMPUS costs ÷ FY96 eligible population = FY96 rate              |
| STEP 2                                     | FY96 rate x FY97 eligible population                                   |
| STEP 3                                     | Apply FY97 inflation rate  |
| <b>Managed Support Contract (MSC) Cost</b> |  |
|  | FY96% of regional RPD <sup>6</sup> cost x FY97 regional target         |
| <b>MILPERS Cost</b>                        |  |
| STEP 1                                     | FY96 costs ÷ onboard strength = FY96 rate                              |
| STEP 2                                     | FY96 rate x FY97 authorized billets                                    |
| STEP 3                                     | Incorporate FY97 pay raise   |
| STEP 4                                     | Calculate FY97 target  |

Putting all the financial variables together, Figure 2-3 shows the overall calculation of a capitated budget. (Martin, 1996)

---

<sup>5</sup> Non-recurring cost due to a unique requirement (i.e. construction).

<sup>6</sup> Regional Paid Data Management Report (RPDMR) is the financial source for CHAMPUS dollars.



**Figure 2-3 Capitaled Dollars**

Concerns have been raised by the BUMED comptroller regarding the applicability of a capitation methodology for allocating resources at the catchment area. The comptroller argues that the MTF commanders will have problems in actual execution against a per capita resource allocation using the present accounting system because of the inherent limitations of the current accounting structure. (Cuddy, 1993)

Alignment of the Navy accounting system to the capitation methodology was identified by BUMED as one of the future issues to be addressed in the implementation process (BUMED, 1993). Since the implementation by DOD of capitation budgeting within the MHSS in FY94, the BUMED Comptroller has executed changes to the cost structure of the accounting system

used by NMCSO. These changes were formulated in order to support the DOD capitation budgeting guidelines. Specifically, the changes were made in order to separate the readiness and operational costs (CAT I and II) from the cost of peacetime healthcare services (CAT III). (Chief, Bureau of Medicine and Surgery, 1996) The goal of the BUMED Comptroller was to avoid improperly inflating the capitation rate for Navy Medicine. (Chief, Bureau of Medicine and Surgery, 1996)

#### **E. SUMMARY**

DOD transitioned from its traditional budgeting system to capitation budgeting in an effort to contain healthcare costs. In FY94, the Military Departments received their budget allocations for unique military, medical-related functions through capitation, based on the Army's capitation budgeting methodology. A budgeting system based on this capitation model was implemented in FY94 and had been adjusted over the following years with a plan for full implementation by FY97. BUMED staff developed the Navy's plan for the use of capitation budgeting at the catchment area level or the MTFs. An issue of concern identified by the BUMED Comptroller is the alignment of the existing Navy accounting system in the implementation of capitation budgeting at the MTF.

### **III. ACTIVITY-BASED COSTING**

#### **A. INTRODUCTION**

The existing accounting system will have to be adjusted as Navy medicine transitions to capitation budgeting from the current budget method (Cuddy, 1993). Realignment of the Navy accounting system is an important aspect of the successful implementation of the new budgeting system. This research investigates an accounting model based on the principles of activity-based costing (ABC) as an alternative to the current accounting structure used by MTFs.

This chapter begins with a discussion of the use of activities as a management tool for an MTF commander. This is followed by a presentation of the difference between ABC and a traditional cost system. Finally, the main ingredients of an ABC system are discussed.

#### **B. ABC AS A MANAGEMENT TOOL**

There are several characteristics of activities<sup>7</sup> that make them a useful management tool for an MTF commander. Some of these characteristics are discussed in the following sections.

##### **1. Activities are action**

Inherent limitations of the current accounting system presents difficulties for decision making in actual execution within a capitation budgeting environment (Cuddy, 1993). The traditional accounting system collects costs by cost elements (such as labor, plant and equipment, and supplies) and does not provide the detailed information necessary to identify needed

---

<sup>7</sup> An activity functions as a means of converting resources (labor, materials, technology) into outputs.

managerial decision changes (Brimson, 1991). ABC can provide an MTF commander the information to make the decisions at a level at which actions can be taken -- at the level of activities.

## **2. Activities drive cost**

Costs of services computed on the basis of cost elements distort cost because the usage of the cost elements are assumed to be proportional to the direct factors such as manhours, ambulatory visits, surgical procedures, and equipment issued. Cost control is often focused on the basis of this information and at the point where cost occurs without consideration of what drives the cost. Identifying activities enables an MTF commander to focus on the factors that drive cost and indicate where action is required. (Brimson, 1991)

## **3. Compatible with total quality management**

Total quality management (TQM) has become part of the DOD culture of doing business. Two objectives of TQM are to do things right the first time and to work for continuous improvement (Brimson, 1991).

Continuous improvement focuses on the elimination of non-value added<sup>8</sup> and secondary activities. Visibility of these activities together with the factors that drive cost can be achieved through activity analysis. An understanding of activities by the MTF commander can provide a foundation to eliminate waste. (Brimson, 1991)

---

<sup>8</sup> Activities which result in wasteful use of time, money, and resources and add unnecessary cost to outputs.

#### **4. Improves decision support**

ABC contributes to decision support in two ways. First, it facilitates in providing the appropriate financial information. Second, it does this in a timely manner.

Cost accounting systems often accumulate cost information based on organizational units (Brimson, 1991). An ABC system would accumulate costs according to the activities performed by an MTF making available the appropriate financial information for a more accurate measure of providing healthcare services.

Financial data from the current Navy accounting system are not timely because it corresponds to the monthly accounting close rather than corresponding to the timing of the decision (Brimson, 1991). Having the appropriate financial information available in a timely manner would support MTF commanders in making decisions on actual execution of the budget.

The adoption by DOD of a capitation-based resource allocation methodology is expected to provide the incentives for MTF commanders to make decisions that improve the provision of healthcare and use of scarce resources (Office of the Assistant Secretary of Defense (Health Affairs), 1993B). This could be facilitated by an ABC system which provides a realistic picture of the impact of managerial decisions on current activity consumption.

#### **C. ACTIVITY-BASED COSTING VS. TRADITIONAL COST SYSTEMS**

Activity-based costing (ABC) can provide accurate information on the cost of activities performed by an organization by linking the cost of these activities to outputs<sup>9</sup> for which these

---

<sup>9</sup> "Outputs" is used to refer to services, products, beneficiaries, projects, or any object that creates a demand for or benefits from the activities of an organization. ABC

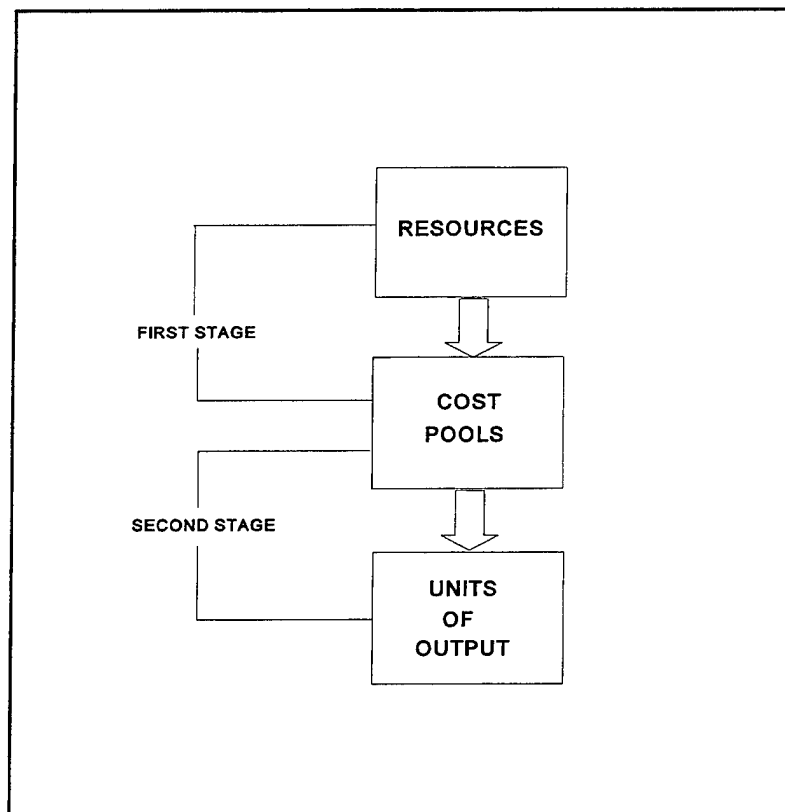


activities are performed (Rotch, 1990; Cooper and Kaplan, 1992A; Cooper and Kaplan, 1992B).

Two factors differentiate ABC systems from traditional systems: 1) cost pools are defined in terms of activities rather than cost centers; and 2) the allocation bases or cost drivers used are structurally different (Cooper and Kaplan, 1992A).

### **1. Cost pools defined in terms of activities**

Traditional cost systems assign an organization's operating expenses to outputs by first allocating to cost pools and secondly to outputs (see Figure 3-1) (Cooper and Kaplan, 1992A).

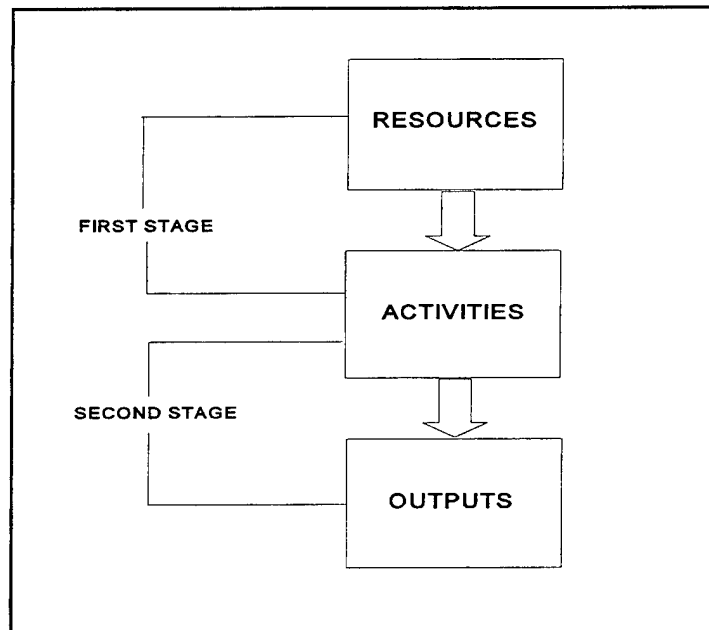


**Figure 3-1 Traditional Two Stage Approach**

---

systems tracks the organization's operating expenses to outputs based on the activities performed for these outputs.

ABC systems estimate the cost of resources used by an organization to produce outputs by breaking down an organization into activities (Brimson, 1991). Resource usage is measured based on the activities for which resources are consumed and then tracing the activity costs to the outputs (see Figure 3-2) (Brimson, 1991; Rotch, 1990; Cooper and Kaplan, 1992A).



**Figure 3-2 ABC Two Stage Approach**

This process identifies the costs of the different activities being performed in an organization allowing for a more accurate reporting of the cost of resources (Rotch, 1990; Cooper and Kaplan, 1992A). An advantage it has over traditional costing is that ABC provides a more accurate measure of the cost of activities that are not performed proportionate to the volume of procedures performed (Rotch, 1990; Cooper and Kaplan, 1992A).

For instance, in a traditional costing system administrative costs, which include costs of operating the accounting, finance, personnel, and other administrative departments, might be included in overhead and allocated to outputs on the basis of direct labor hours. This could result in an inaccurate cost allocation because there may not be a cause-and-effect relationship between the accounting services provided to other departments and direct labor hours. Thus, departments with the largest proportion of direct labor absorb the bulk of the administrative costs. By determining the cost drivers<sup>10</sup> for the accounting department, the most appropriate cost base for allocation allows an ABC system to distribute overhead costs more accurately.

## **2. Structurally different allocation bases**

In a traditional costing system, volume-driven allocation bases or cost drivers, such as direct labor hours, ambulatory visits, material purchases and procedures performed are used to assign an organization's operating expenses to the outputs (Brimson, 1991; Cooper and Kaplan, 1992A); Cooper and Kaplan, 1992B). When activities that are not directly related to short-term volume (such as engineering support, purchasing, and ancillary support) are allocated using volume-driven bases, output costs can become inaccurate.

The result is a misrepresentation of the relationship between the activities that generate the support cost and outputs. The accuracy of the costs of outputs reported by some traditional cost systems, when they are expended in relation to the volume of outputs produced is questionable (Brimson, 1991). By shifting the allocation base to an activity that is related to

---

<sup>10</sup> A driver is an activity that directly influences the performance and/or the cost structure of other activities.

output, ABC systems can provide more accurate information on the link between the use of resources and output (Rotch, 1990). Unlike some traditional cost systems, ABC systems directly measure the cost of resources used by an organization to perform specific activities and then link the activity costs to the outputs.

#### **D. ESSENTIAL FACTORS IN ACTIVITY-BASED COSTING**

Several writers (e.g., Euske (1992), Brimson (1991), Cooper and Kaplan (1992)) have identified factors regarded as essential to designing ABC systems.

##### **1. Activity analysis**

ABC is enhanced by the discrete tracing of activity cost to outputs. This is done through an activity analysis which identifies how an organization uses its resources to meet its objectives (Brimson, 1991). However, defining too many activities could lead to an enormous task of gathering data that could become costly (Cooper and Kaplan, 1992A).

##### **2. Trace resources to activities**

Thinking about cost in terms of processes, drivers and activities can be useful for capturing costs incurred at a particular point in time (Euske, 1992, p.41).

A process is made up of a chain of events or decisions (drivers) which generate the activities performed in an organization. The association between drivers and activities allows the proper assignment of costs to the tasks performed. (Euske, 1992) However, the designer of an ABC system may be forced to assign costs to activities from financial information in the general ledger. Most general ledger systems report the costs of the different types of resources and not

the costs of activities. There are three ways of assigning resource cost to activities: direct charging, estimation, and arbitrary allocation. (Cooper and Kaplan, 1992A)

Direct charging captures cost more accurately than the other methods but becomes expensive to use. Using estimates is more affordable. Estimates can be derived from surveys and interviews. Use of arbitrary allocation should be postponed until there is no other means available to estimate the cost of resources used. (Cooper and Kaplan, 1992A)

Calculation of an activity cost is computed in terms of all the significant traceable factors of production<sup>11</sup> used to perform the activity. The activity cost is then derived by mapping the resources employed to perform an activity through a causal relationship. The activity cost is expressed in terms of an activity measure, which may be an input, output, or a physical attribute of the activity. (Brimson, 1991)

### **3. Identify outputs**

It is necessary to determine all the outputs produced by resources whose costs are being assigned. Omitting certain categories of outputs will result in a disproportionate assignment of costs to the remaining outputs. Similarly, costs of future or past products and unused capacity should be excluded when assigning costs to currently produced outputs. (Cooper and Kaplan, 1992A)

---

<sup>11</sup> A factor of production is said to be traceable when a cause-and-effect relationship has been established with a specific activity.

#### **4. Link activity costs to outputs**

The activity-based cost pools are distributed to outputs by tracking the individual activities associated with the output and charging the cost of each activity directly to the output. Proper distribution of costs to the second level is achieved by recognizing the generator of a cost or activity. (Euske, 1992)

#### **E. SUMMARY**

DOD is transitioning from its traditional budgeting system to capitation budgeting in an effort to contain healthcare costs. ABC may have the potential to provide Navy medicine an accounting system to its current system for providing the necessary financial information that would support the cost objectives of capitation budgeting. The potential advantages ABC could provide an MTF commander are visibility and understanding of the costs of the activities associated with providing healthcare. This would facilitate the calculation of an appropriate capitation rate for the MTF. Increased accuracy of the estimate of the costs of the activities for which resources are consumed should also allow the MTF commander to effectively budget for the services rendered within the catchment area.



## **IV. MODEL DEVELOPMENT**

### **A. INTRODUCTION**

Computation of a capitation rate for NMCSO requires the availability of financial information for an accurate estimate of the cost of providing healthcare within a catchment area. Therefore, the ability to effectively measure healthcare costs is essential for the successful implementation of capitation budgeting.

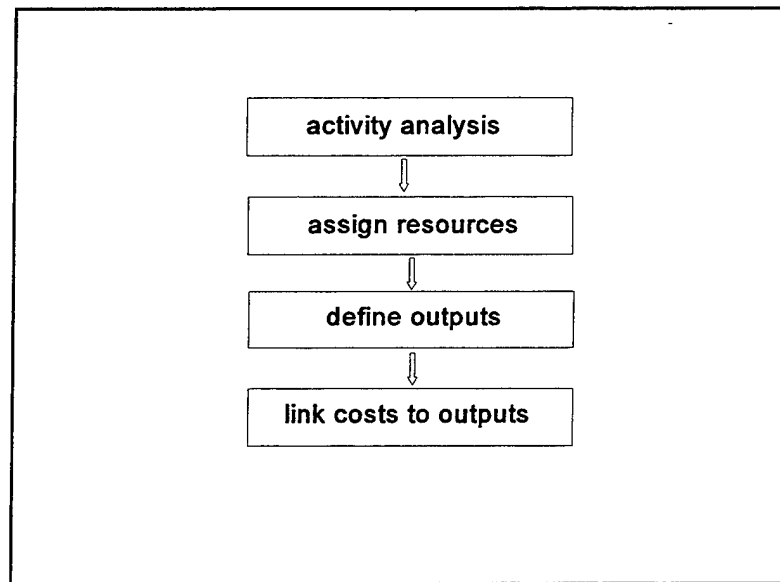
The purpose of this chapter is to discuss the construction of a proposed model using the principles of ABC as the basis for measuring the cost of providing healthcare at NMCSO.

The models by Brimson (1991) and Cooper and Kaplan (1992) are used in the development of a model for measuring the cost of providing healthcare at NMCSO. Figure 4-1 shows the steps necessary to design the model. An activity analysis to determine the activities that NMCSO performs in providing direct care is the first step. Next, resource costs are traced to the individual activities using the method of estimation. This is followed by identifying the cost objects or outputs for which activities are performed. Finally, activity costs are traced to outputs based on cost drivers.

### **B. ACTIVITY ANALYSIS**

The first step in this ABC model is to break down the organization, NMCSO, into understandable and manageable activities and outputs.



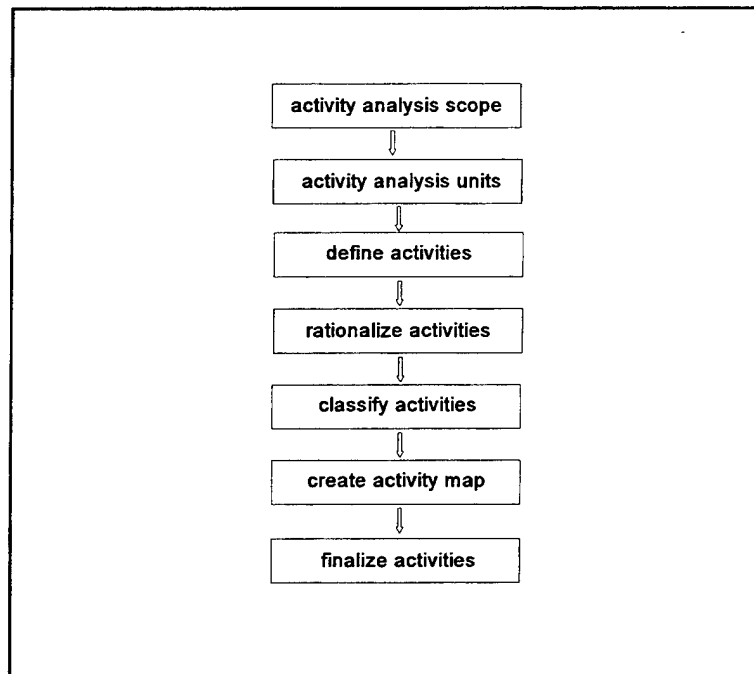


**Figure 4-1 Steps to Develop an ABC Model**

An activity analysis according to Brimson (1991, p. 78),

... identifies the significant activities of an enterprise to establish a clear and concise basis for describing business operations and for determining their cost and performance. The process of analyzing time use is known as **activity analysis**.

Defining a very large number of activities will result in a disproportionately high cost of measurement and will be time consuming. Identifying numerous activities can lead to a huge data collection task that would make measurement of the activity-output relationship difficult and costly. An organization designing its first ABC system typically defines 25 to 100 distinct activities (Cooper and Kaplan, 1992A). Figure 4-2 illustrates the primary steps performed for an activity analysis and are described in the following sections (Brimson, 1991).



**Figure 4-2 Activity Analysis Approach**

**1. Activity analysis scope**

Determining the range of activities for the analysis allows for information to be efficiently gathered (Brimson, 1991). The scope of this activity analysis is limited to O&M dollars for direct healthcare services provided at NMCS D as delineated in the Navy capitation plan.

**2. Activity analysis units**

To facilitate a comprehensive and cost-effective analysis, an organizational unit should be divided into groups or departments with a common purpose. These are called activity units that may correspond to organizational units or cross organizational boundaries. (Brimson, 1991)

A starting point for identifying activity units for NMCS D is its organization chart. Information for dividing an organization unit into groups may also be obtained from flowcharts, departments instructions, facilities' layouts and other related documentation (Brimson, 1991).

### **3. Define activities**

Defining the activities performed by an activity unit can be performed by employing several techniques for data collection, such as analysis of historical records, organizational units, business processes, business functions, and directed industrial engineering studies. Techniques which require more precise measurements require considerable training to perform and usually require more time for data collection. (Brimson, 1991)

Determining the method used for defining the activities performed at NMCS D depends on the degree of precision required and the cost of measurement. An activity analysis for NMCS D can be initiated with an organizational review of each department followed by a business process<sup>12</sup> or functional analysis.<sup>13</sup> However, it is important to make use of existing financial information such as a past activity analysis which may have been part of a zero-base budgeting or special project. (Brimson, 1991)

---

<sup>12</sup> A business process analysis studies the business processes (a network of related activities that occur in a structured sequence to accomplish specific objectives and are interconnected by a flow of information) that predominate the organization and defines them according to major activities.

<sup>13</sup> A functional analysis studies each major function performed by an organization and breaks it down into activities. This allows common activities to be considered across the whole organization.

A starting point can be records of past budget submissions and financial reports generated to track budget expenditure. These can then be supplemented with further activity analyses.

#### **4. Rationalize activities**

The next step after identifying the activities performed at NMCS D is to arrange them in an activity list at a level of detail that will allow for proper separation or combination of activities with different cost behavior patterns.<sup>14</sup> (Brimson, 1991)

The analysis requires that the list of activities be manageable and not too complex to help influence business decisions. It also requires that the list provides enough detail to allow for sufficient information to account for activity cost behavior. Usually, the flow of information or outputs between activities provides insight into how to separate/combine activities. (Brimson, 1991)

Each major activity must be decomposed to the level of detail where costs are proportionately distributed among activities with similar inputs and outputs. Defining the activities in this manner would provide the MTF commander with more accurate costing of healthcare services and improved decision making information. However, one needs to be cautious when aggregating dissimilar activities because the aggregation may inaccurately indicate the cost behavior patterns. (Brimson, 1991)

---

<sup>14</sup> Cost behavior patterns are defined as the manner in which costs behave as volume changes over a range of activity levels.

## **5. Classify activities**

Each activity on the activity list is classified as primary or secondary. A primary activity is one that directly contributes to the mission of a department or an organization. It also produces an output used outside an organizational unit. (Brimson, 1991) For example, performing a laboratory test is a primary activity conducted by the Laboratory Department for patient care units.

Activities performed by a department to support the primary activities are secondary activities. They are generally activities such as administration, training, and maintenance. (Brimson, 1991) Ordering supplies and setting up equipment are examples of secondary activities for conducting a laboratory test.

## **6. Create activity map**

The activity list is arranged to create a NMCS D activity map which identifies the interaction of its functions, business processes and activities. Business processes and activities are first mapped to functions, then activities are connected to business processes. Processing the information for ABC creates a map of the activities performed by an organization and a description of the cost structure in terms of activity consumption. (Brimson, 1991) This can provide information on activity cost which would help an MTF commander to make decisions on how to manage costs.

## **7. Finalize activities**

The result of the ABC activity analysis is an aggregate list of activities for NMCS D, the product of the organizational, business process, and functional analyses conducted. This list should provide a breakdown of NMCS D into its activities for a clear and concise understanding of NMCS D operations and determining the cost of those operations.

### **C. ASSIGN RESOURCE COSTS TO ACTIVITIES**

Once activities are identified for the services provided by NMCS D the costs associated with performing these activities will be mapped to the individual activities. Assigning the expense of all traceable factors of production employed to perform an activity permits the calculation of an activity cost (Brimson, 1991).

The initial ABC model of NMCS D is designed to assign resource costs to activities by estimating expenses from the Uniform Management Report (UMR) and Medical Expense and Performance Reporting System (MEPRS) reports. UMR and MEPRS provide a means of viewing financial data in terms of execution dollars and associated workload (Roscham, 1993). Additionally, these reports list the amount of O&M dollars that will be used by BUMED for calculating the capitation rate at the catchment area level and for which the MTF commander is responsible for execution. Part of the analysis performed for this research was to determine the availability of information from the UMR and MEPRS for identifying the appropriate activities that would be used in the proposed ABC model.

Knowing the cost per activity is important in managing cost. The conventional approach of capturing costs at the cost element level combines multiple demands for a factor of production (Brimson, 1991). Knowing the total consumable supplies expenses of a department, for example, does not provide insight into the activities that generate the need for supplies. To control the cost of consumable supplies a manager must first understand the factors (that is, the activities) that drive the need for supplies.

An activity cost is expressed in terms of an activity measure. The activity measure is that unit or elements of work or effort which causes the cost of a given process to change most directly. It is critical to select the appropriate activity measure because it makes visible the factors that drive activity volume and subsequently cost. (Brimson, 1991) Examples of activity measures include number of patients, number of manhours, number of prescriptions, and number of laboratory tests.

# **1. Methods of assigning resource costs**

There are three ways of assigning the cost of resources: direct charging, estimation, and arbitrary allocation. (Cooper and Kaplan, 1992A)

## ***a. Direct charging***

Direct charging uses actual usage of resources which most accurately captures the cost of resources used by activities. However, this method is expensive because it requires measurement of actual usage. (Cooper and Kaplan, 1992A)

***b. Estimation***

ABC models typically estimate the cost of resources through interviews and surveys when direct measurement is not available. Interviews are relatively fast and inexpensive to perform and can be supplemented or replaced with surveys. Both interview and survey methods require supervisors to estimate the percentage of time spent by employees on the activities performed by the department. (Cooper and Kaplan, 1992A)

Assigning resource costs for NMCS D will also involve estimating expenses from existing financial reports, such as UMR and MEPRS, which are used to account for execution of O&M dollars.

***c. Arbitrary allocation***

When neither direct charging or estimation can be utilized for assigning resource costs an arbitrary allocation can be performed. This method does not improve the understanding of the economics of activities and must be avoided whenever possible. (Cooper and Kaplan, 1992A)

**2. Steps in assigning resource costs**

There are five key steps in tracing resources to activities: determine source of data, group related general ledger costs, establish causal relationship, trace people-related costs, and trace all other costs. (Brimson, 1991)



**a.      *Source of data***

Initial ABC models usually assign resource costs to activities by estimating expenses from the general ledger. Subsequent models use either budgeted or targeted information which enables an organization to make decisions based on projected activity and outputs costs, rather than on historical costs. (Cooper and Kaplan, 1992A) As stated earlier, data for NMCS D will be collected from the UMR and MEPRS reports.

The general ledger is the recommended source of cost information because financial data under ABC would reconcile to the financial reporting system, ensuring consistency between the management system and financial accounting data. The level of detail in the current accounting system rarely limits the cost analysis but affects the level of effort to translate cost to activity costs. (Brimson, 1991)

**b.      *Group related costs***

Expenses collected from the general ledger are classified according to expenditures (e.g., salary and wages, office supplies, insurance, and depreciation) which are accumulated by department or cost centers. In order for an accounting system containing this types of resource costs to provide meaningful information, it needs to mirror the service process. Therefore, it is recommended that tracing resource costs to activities be performed for expenses with similar cost behavior and summarized by natural expense categories. (Brimson, 1991)

For example, expenses with similar cost behavior pattern such as salary, income tax withholding, and benefits can be summarized under a natural expense category for labor.

Other natural expense categories include material, utilities, plant and facilities, information systems, travel, inventory, and intercompany activities. (Brimson, 1991)

*c. Establish causal relationship*

After expenses are grouped on the basis of similar cost behavior, the next step is to establish a causal relationship. Direct consumption of a factor of production by an activity defines a causal relationship. The key factor in establishing this relationship is defining an activity measure that is common to both the factor of production and the activity. (Brimson, 1991)

An activity measure is a measure of activity volume by which the costs of a given process vary most directly. An activity measure is an input, output, or physical attribute of the activity. (Brimson, 1991) For example, the number of patients is an activity measure that determines the volume of examinations performed. Similarly, the amount of examinations is normally stated in terms of the number of patients seen. Therefore, it can be said that there exist a causal relationship between the number of patients and examinations performed.

Two additional factors are important in establishing a causal relationship: reproducibility and completeness. Reproducibility allows others to understand what was done in terms of the analysis performed. (Brimson, 1991) For example, an individual not part of the ABC design team computing the cost of examinations should be able to duplicate the process used for cost estimation.

The analysis encompasses the entire system wherein nontraceable costs are allocated to primary activities. (Brimson, 1991) Administration costs incurred in support of performing examinations are allocated when estimating the cost of an examination.

*d. Trace people-related costs*

Next, human resources are traced to activities. Time or a physical output of an activity is usually the basis for tracing labor costs to activities. When the activities performed to produce outputs are homogenous, the use of physical outputs can be employed for tracing employee costs. Otherwise, time spent on activities is a more valid basis if outputs require different amounts of effort or workers perform several activities. (Brimson, 1991) For example, when the output "treatment" is considered, an appropriate measure of employee costs is time because different activities are performed to produce this output, including examination, laboratory tests and nursing care.

Tracing employee costs to activities starts with an analysis of the organization chart and the corresponding job descriptions. For each job classification techniques such as interviews, review of logs, or engineering studies are used to determine which of the activities employees support in a department. Labor cost is then charged to activities by multiplying people-related costs by the time percentages determined in the activity analysis, using one of three methods: (Brimson, 1991)

(1) Total Labor Method. Traces labor cost to activities by using percentage of time spent on each activity within a department.

(2) Occupation Code Method. Traces labor cost to activities by using percentage of time spent on each activity by specific class of employee.

(3) Specific Employee Method. Traces labor cost to activities by using percentage of time spent on each activity by individual employee.

*e. Trace all other costs*

It is seldom possible or cost-effective to charge 100 percent of a department's costs to activities. Organizations usually trace between 80 to 90 percent of department costs to activities. The remaining are "nontraceable" which represent general department support costs. Because these costs are tied to a specific department, they should not be allocated using a hospital-wide cost pool. It is recommended that allocation of general department costs be made to the organization's primary activities based on the department's primary factor of production. (Brimson, 1991) For example, pharmaceutical "nontraceable" costs be assigned based on prescriptions filled.

**D. DEFINING THE OUTPUTS**

The third step in this ABC model identifies the outputs produced by activities at NMCSO. An output is the product or the result of an activity. The product of an activity is also its activity measure (Brimson, 1991). Typical outputs include prescriptions, treatment, laboratory tests, or projects.

Within an ABC system all outputs produced by resources should be identified. This facilitates accurate tracking of costs to outputs. If certain categories are omitted, too many costs

are assigned to the remaining outputs resulting in inaccurate costs of the outputs. Similarly, resources used for future or past products should be excluded from costs assigned to current products. Furthermore, costs attributed to unused capacity should not be allocated to actual products produced. (Cooper and Kaplan, 1992A)

The successful implementation of capitation budgeting at the catchment area level requires the accounting system to accurately measure the costs of outputs. It is necessary to identify all outputs produced by an MTF. The process of identifying all of the output at NMCS D involves a detailed analysis which requires more resources than are available for performing this research. However, the analysis in Chapter VI provides an example of the model applied to the current system operating at NMCS D.

#### **E. LINK ACTIVITY COSTS TO OUTPUTS**

When all outputs produced by an organization have been identified, activity costs can be assigned to outputs. Tracing activity cost to the final cost objective has two primary purposes, to understand the cost structure and to determine superior alternatives to performing activities (Brimson, 1991).

Knowing the cost of providing a service supports the decision-making process of an MTF commander. This final step of tracing activity cost to outputs can provide the MTF commander visibility of how resources are consumed by the activities performed by the MTF and allows him/her to execute the budget effectively.

It is important that all costs be traced to a final cost objective where practical and economically feasible. As stated previously, a rule of thumb is that 80 to 90 percent of a department's costs should be traced to the activities performed by the department -- tracing more is usually uneconomical. (Brimson, 1991)

Costs can be traced to the final cost objective using a bill of activities (BOA). The BOA indicates the sequence of activities and the quantity of each activity used in achieving the organization's mission. (Brimson, 1991)

From the BOA activity costs can be traced to outputs the same three ways as resource costs can be assigned to activities: direct charging, estimation, and arbitrary allocation. (Cooper and Kaplan, 1992A)

Activity costs at NMCS D can be assigned to outputs by estimation. This would provide consistency with the method used to assign resource costs to activities. Estimates obtained from realistic cost behavior patterns provide an excellent basis for making routine decisions and controlling operations (Brimson, 1991).

## **F. SUMMARY**

The transition to a capitation-based resource allocation within Navy medicine will involve an adjustment of the current accounting structure to one that would enable the MTF commander to support the cost objectives of this budgeting system. This research investigates a model based on the principles of ABC to facilitate in designing an alternative accounting structure to the current system for implementing capitation budgeting.

An ABC system can identify the way an MTF uses its resources to accomplish its mission. ABC can make it possible for activity costs to be measured more accurately than traditional cost systems. A better understanding of activity costs should allow an MTF commander to make appropriate budget execution decisions using a capitation budget. Additionally, ABC could provide the means for a more accurate calculation of a unit cost which can serve as an estimate of the direct care portion of a capitation rate for NMCS.

## **V. ACCOUNTING SYSTEM AT NAVAL MEDICAL CENTER SAN DIEGO**

### **A. INTRODUCTION**

The purpose of this chapter is to present the findings of an analysis of the current cost accounting system at NMCSO. The system was analyzed to determine its usefulness in providing the information for and implementing capitation budgeting. Records of the Military Expense and Performance Reporting System (MEPRS) and Uniform Management Report (UMR) were analyzed to determine how costs are accumulated, and the usefulness of the systems for providing information to support implementation of capitation budgeting at NMCSO.

This chapter begins with a discussion of how cost accounting is performed at NMCSO. Next, the process of cost accumulation by the MEPRS and UMR systems is described separately, for an understanding of the cost information they provide.

### **B. CURRENT ACCOUNTING SYSTEM**

Cost accounting at Navy activities is a job order cost accounting system. The Navy's job order cost system is used to facilitate proper recording and classification of costs. Costs are accumulated and classified using job order numbers (JONs). A JON is structured to provide information on how funds are spent. The basis of this information is the uniform chart of expense accounts. (Practical Comptrollership Manual, 1993)

The uniform chart of expense accounts classifies and charges all expenses to the Navy for performing the operations of an organization. NMCSO operating expenses are reported by Sub-



Activity Group (SAG), Functional/Sub-Functional Category (F/SFC), Cost Account Code (CAC), and Expense Element (EE) which make up the JON. (Practical Comptrollership Manual, 1993)

### **1. Sub-Activity Group (SAG)**

The SAG account accumulates expenses and gross adjusted obligations<sup>15</sup> in the same manner in which an MTF commander formulates, justifies, and executes the operating budget. This account facilitates evaluation of program execution and provides execution data to support the development of subsequent budgets. It also represents the major functional areas in Navy medicine for administration of O&M funds. (Practical Comptrollership Manual, 1993) For example, all expenses associated with providing ambulatory care are categorized under SAG "MC".

The SAG structure for medical facilities is defined by the BUMED Comptroller. See Appendix A for a listing of the valid SAG categories used by NMCS.

### **2. Functional/Sub-Functional Category (F/SFC)**

Functional/Sub-functional category codes represent the grouping of operations or tasks related to the performance of a particular function. For example, "YH" represents the expenses and gross adjusted obligations related to the operation of a clinical laboratory service. The code is intended to identify a particular operation for which resources are consumed in performing a function. (Practical Comptrollership Manual, 1993)

---

<sup>15</sup> This is the sum of all obligations that have been matched or not matched with an expenditure (liquidated or unliquidated).

The relationship between the SAG and F/SFC categories can be illustrated by the following example. A major function performed within an MTF is ambulatory care. This is assigned a SAG code of "MC". In the process of providing ambulatory care, resources are consumed in performing operations such as administration (D1), supply operations (E1), laboratory (YH), janitorial (YN) and personnel support (S1). The corresponding F/SFC codes provide visibility of the costs associated with these tasks.

The F/SFC structure for medical facilities are delineated by the BUMED Comptroller. See Appendix B for a listing of the F/SFC codes used by NMCS D.

### **3. Cost account code (CAC)**

Transactions are classified according to the purpose of a transaction using cost account codes (CAC). A detailed breakdown of where resources are being used is provided by CACs. Each CAC has a unique measurement of output called a work unit. (Practical Comptrollership Manual, 1993)

Work units are used to accumulate data and prepare reports on actual work (units) performed together with actual expenses (Practical Comptrollership Manual, 1993). For example, ambulatory visit is the work unit associated with the CAC "4BHA" for Primary Care Clinic. Both the CACs and work units are established by the BUMED Comptroller. See Appendix C for a listing of some of the cost accounts and work units that NMCS D uses.

#### **4. Expense elements (EE)**

Expense elements identify the kinds of resources used by an organization (Practical Comptrollership Manual, 1993). For example, expense element "T" identifies expenses associated with medical/dental supplies. The expense elements are defined by the BUMED Comptroller. See Appendix D for a listing of the expense elements used by NMCS D.

#### **C. MILITARY EXPENSE AND PERFORMANCE REPORTING SYSTEM (MEPRS)**

Military Expense and Performance Reporting System (MEPRS) provides uniform reporting of expense, manpower, and workload (performance) data by fixed DOD medical and dental facilities at the local, Service, and DOD levels (Office of the Assistant Secretary of Defense (Health Affairs), 1993B). Financial, workload, and manpower data are accumulated to final cost accounts using MEPRS codes. (Navy MEPRS User Guide, 1996)

##### **1. MEPRS Code Structure**

The MEPRS codes used by NMCS D are provided in a DOD instruction, DOD 6010.13M. A MEPRS code is assigned for each work center within an MTF meeting the following criteria: (Navy MEPRS User Guide, 1996)

- Identifiable expenses
- Allocated/assigned manpower
- Allocated physical space
- A meaningful work output
- A meaningful workload measure

- A uniqueness of service provided or expenses incurred when compared to other established work centers
- Compatibility with the MTF organizational structure

An alphabetical coding structure is employed in the MEPRS with the maximum of four characters per code. The first character defines a functional category, the second letter identifies a summary account, the third position uniquely defines a subaccount for a particular work center and a fourth character can be used by an organization to meet a specific local need. (Navy MEPRS User Guide, 1996) For example, the MEPRS code BAAO is broken down as follows:

- B      - Functional category                      - Ambulatory Care
- BA     - Summary Account                        - Medical Care
- BAA   - Subaccount/Work Center               - Internal Medicine
- BAAO - Special Account                         - Internal Medicine at Branch Medical  
Clinic Naval Station

*a. Functional categories*

The first position of the MEPRS code indicates functional categories which identify major activities and organizational functions within an MTF. Costs are accumulated for the following: (Navy MEPRS User Guide, 1996)

A - Inpatient care

B - Ambulatory care

C - Dental care

D - Ancillary services

E - Support services

F - Special programs

G - Readiness

***b. Summary accounts***

The second character of the MEPRS code identifies summary accounts which represent general areas within each functional category (Navy MEPRS User Guide, 1996), such as:

AB - Surgical care

BD - Pediatric care

CB - Dental services

DC - Radiology

EH - Laundry

FB - Public health

GB - Readiness exercises

***c. Subaccounts***

The third position of the MEPRS code represents subaccounts which describe the actual work centers in an MTF/DTF, like: (Navy MEPRS User Guide, 1996)

ABI - Plastic surgery  
BDC - Well baby clinic  
CBA - Dental laboratory  
DCA - Diagnostic radiology  
EHA - In-house laundry  
FBB - Preventive medicine  
GBA - Field or fleet readiness exercises

*d. Special accounts*

A fourth character can be used by an organization to meet a specific local need for enhancing the utilization and flexibility of MEPRS output at the MTF level. (Navy MEPRS User Guide, 1996) NMCS D uses an alphabetic character in the fourth position to designate a specified location or to identify special accounts. BAAO, for example, contains the same information as the earlier BAA example for Branch Medical Clinic Naval Station.

The letters E and F cannot be used at the local level. DOD uses E for the collection of workload in work centers that are solely supported by contract personnel and F for workload provided by partnership<sup>16</sup> personnel. (Navy MEPRS User Guide, 1996)

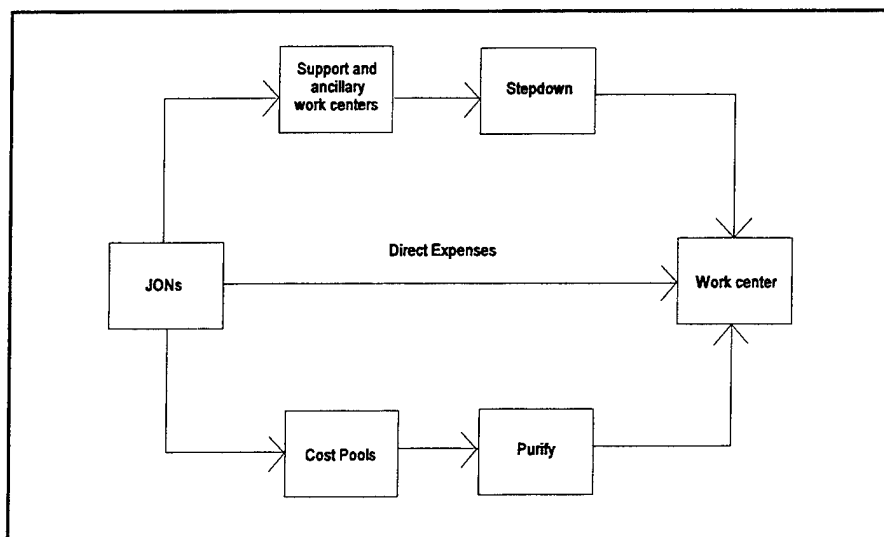
---

<sup>16</sup> NMCS D has resource sharing contracts with AETNA Insurance that are designated partnership contracts.

## 2. Data Collection

The MEPRS collects three types of information in cost accounts: expense, workload and manpower. MEPRS is designed to cumulatively collect data from one cost account and allocate them to another based on the services provided (workload). (Navy MEPRS User Guide, 1996) MEPRS data are presented as costs, full-time equivalents (FTEs), inpatient work units (IWUs), ambulatory work units (AWUs), medical work units (MWUs), and by performance factors.

Cost accounts are classified as either revenue producing/final accounts or nonrevenue producing/intermediate accounts. The functional categories Inpatient Care (A), Ambulatory Care (B), Dental Care (C), Special Programs (F) and Readiness (G) are considered revenue producing or final accounts. For this reason expenses from these categories do not require further allocation. The functional categories Ancillary Services (D) and Support Services (E) are nonrevenue producing or intermediate accounts. Cost from these categories are allocated to the final accounts using a stepdown allocation process. (Navy MEPRS User Guide, 1996) Figure 5-1 graphically shows how costs are charged to a work center.



**Figure 5-1 Flow of expense data to a work center in MEPRS**

*a. Expense*

The MEPRS recognizes expenses within an MTF as either direct or indirect. A direct expense is directly traceable to a work center. An indirect, stepdown expense, or overhead, cannot be directly associated with a particular work center. (Navy MEPRS User Guide, 1996) The indirect costs are ancillary, support and cost pools.

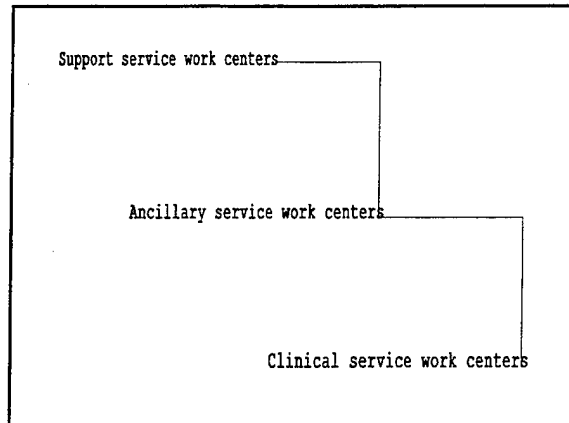
(1) Direct Expenses All work centers normally incur direct expenses in the performance of ambulatory care or inpatient care. Direct expenses for military and civilian salaries, travel, office supplies, and other broad categories of expense are tracked by using separate JONs for each work center. (Navy MEPRS User Guide, 1996).

(2) Ancillary and Support Costs. Functional categories Ancillary Services (D) and Support Services (E) identify ancillary and support services, respectively, provided to other work centers. Expenses from these accounts are allocated to the final accounts (i.e., inpatient, outpatient, dental, special programs and readiness) using a stepdown procedure. In the stepdown process, direct expenses are allocated on the basis of performance factors and the flow of health care services. (Navy MEPRS User Guide, 1996) The stepdown process is graphically depicted in Figure 5-2.

Performance factors represent a unit of measure such as:

- dispositions, occupied bed days, and visits for inpatient/outpatient work centers
- weighted procedures for ancillary work centers





**Figure 5-2 Stepdown Process**

- FTEs for administrative support work centers
- square footage for utilities and housekeeping services

Performance factors are also used for the computation of unit costs including cost per occupied bed days, disposition, and visit. (Navy MEPRS User Guide, 1996)

The direct and indirect relationship of health care services provide the basis upon which the flow of health care services is defined. Support and ancillary services are traditionally considered indirectly related to the provision of health care, while clinical services are directly related. Support services are considered more indirect in the provision of health care than ancillary services since support services provide support to other support services, ancillary services, and clinical services. The flow of health care services list support services first, followed by ancillary services when allocating indirect costs to clinical services. (Navy MEPRS User Guide, 1996)

The stepdown process begins by allocating the cost of support services to other work centers, then the ancillary service costs are allocated to the clinical work centers. The amount stepped down into other work centers from a work center will consist of its initial direct costs and indirect costs received from the stepdown. As a work center's costs are stepped down, its balance becomes zero. The net effect of the stepdown process results in a final expense being charged to the inpatient, outpatient, and dental services that will serve as the basis for computing unit costs. (Navy MEPRS User Guide, 1996)

(3) Cost Pools. Cost of resources shared among work centers such as personnel, space, and supplies cannot be tracked directly to work centers. These expenses are assigned to cost pools since the actual use of these resources can not be determined by individual work centers. Allocation of these costs is based on a ratio of total workload to the workload reported by each work center. (Navy MEPRS User Guide, 1996) For example, the internal medicine clinic is charged its share of the cost pool for an inpatient mixed-ward supply closet in proportion to the amount of occupied bed days (OBDs) it performed in the month.

The sum of the cost pool allocations to the work centers (e.g., internal medicine clinic) under a particular final account (e.g., ambulatory care) yields the amount assigned to that account from the cost pools. This allocation process is said to "purify" costs charged to final accounts when the work center balances are closed out at this level. Therefore, expenses from cost pools are said to be allocated using a "purification process."

**b. Workload**

MEPRS measures workload on the basis of a performance factor such as a disposition, occupied bed day, visit, FTE, square footage, and weighted procedure. This unit of measure represents the relative resource consumption of a service performed by a work center. (Navy MEPRS User Guide, 1996) The amount to be allocated is calculated by counting and weighing the amount of services provided to other work centers each month using the performance factor. Appendix E lists the work centers and their respective performance factors.

A weight is assigned to each procedure to account for differences in resources used to perform each procedure. Ideally, the weights should account for all differences in resource use, including personnel time, materials, and equipment. However, MEPRS costs reflect primarily differences in personnel time.

Using hypothetical data, Table 5-1 depicts the allocation of workload from an ancillary work center for services rendered to other inpatient work centers. This is the same process employed for support services.

**Table 5-1 Allocation of ancillary workload rendered to inpatient work center**

| MEPRS code | Inpatient work center | Total weighted procedures |
|------------|-----------------------|---------------------------|
| AAA        | Internal medicine     | 200                       |
| ABK        | Urology               | 350                       |
| ACB        | Obstetrics            | 450                       |
| ADA        | Pediatrics            | 100                       |
| AEB        | Podiatry              | <u>50</u>                 |
|            |                       | 1,150                     |

The table lists the total workload performed for the inpatient work centers. It shows that the ancillary work center performed 200 procedures for internal medicine. After counting the number of procedures rendered the ancillary workload expense is allocated directly to each inpatient work center in proportion to the amount of procedures provided to each work center.

Table 5-2 shows the proportion of the total procedures that will be allocated to each work center. In this example, approximately 17 percent (200/1,150) of the ancillary workload expense would be allocated to the internal medicine work center. The same method is used to allocate expenses from support service work centers.

**Table 5-2 Allocation of ancillary workload rendered to inpatient work center**

| MEPRS code | Inpatient work center | Total weighted procedures | Percent allocated |
|------------|-----------------------|---------------------------|-------------------|
| AAA        | Internal medicine     | 200                       | 17%               |
| ABK        | Urology               | 350                       | 30%               |
| ACB        | Obstetrics            | 450                       | 40%               |
| ADA        | Pediatrics            | 100                       | 9%                |
| AEB        | Podiatry              | <u>50</u>                 | <u>4%</u>         |
|            |                       | 1,150                     | 100%              |

*c. Manpower*

Manpower data is entered by personnel in the Manpower Department at an MTF into the MEPRS/Military Labor 3 (MML3) module of the Standard Personnel Management System (SPMS). An individual is classified into one of the personnel categories and skill types. The personnel categories are officer, enlisted, civilian, contract, reserve, volunteer, and other.

The different skill types are clinician, direct-care professional, direct-care paraprofessional, registered nurse and administrative/clerical. (Navy MEPRS User Guide, 1996)

Personnel time is captured as available<sup>17</sup> or non-available<sup>18</sup> to a specific work center by using MEPRS codes. Time spent in various work centers provides the basis for assigning personnel expense to the appropriate MEPRS codes. (Navy MEPRS User Guide, 1996) In Table 5-3, an OB/GYN physician may report his hours for a month as follows:

**Table 5-3 Reporting Personnel Time**

| <b>MEPRS Code</b> | <b>MEPRS Description</b> | <b>Available time (hrs)</b> | <b>Non-available time (hrs)</b> |
|-------------------|--------------------------|-----------------------------|---------------------------------|
| BCB               | Gynecological Clinic     | 60                          | 9                               |
| BCC               | Obstetrics Clinic        | 60                          | 5                               |
| EBC               | Administration           | 20                          |                                 |
| GFA               | Physical Training        | 12                          |                                 |

These manhours are entered into SPMS and are automatically converted to FTEs and labor cost. The Navy composite standard military rates and the civilian standard rates are used to calculate the labor cost which represent the average pay for various military and civilian pay scales. (White, 1993)

---

<sup>17</sup> Time spent in support of the medical mission and work center functions, divided by 168.

<sup>18</sup> Time spent in support of activities unrelated to the medical mission or work center functions, divided by 168.

#### **D. UNIFORM MANAGEMENT REPORT (UMR)**

The UMR is a management tool for cost identification, execution reporting, and fiscal planning. It focuses attention on mission performance and productivity by highlighting variances from planned performance/operating budget. The UMR provides a mechanism to implement unit pricing and provides a basis for management's decision making process. (BUMEDINST 7301.1)

The expenses tracked by using JONs provide the cost information found in the UMR. Cost information is accumulated for individual cost centers/sub-cost centers (CC/SCC) and classified according to CACs by expense element. A work unit or measure of performance is assigned to each CAC for the calculation of a unit price.

The UMR is generated by the Defense Finance and Accounting Service San Diego Operating Location in different formats, of which Format C is the most commonly used by MTFs because it provides information by cost centers and provides the most cost information. Figure 5-3 shows part of the UMR-C.

##### **1. Cost/sub-cost Center Structure**

The CC/SCC structure reflects a logical breakdown of the organization from a management standpoint. It is designed for visibility of all functions under the cognizance of a cost center manager. Construction of the CC/SCC structure is the choice of the local activity.

| FOR PERIOD ENDING 30 SEPTEMBER 1995 PAGE 10 |             |                          |           |                 |                    |         |                                       |        |             |
|---|-------------|--------------------------|-----------|-----------------|--------------------|---------|---------------------------------------|--------|-------------|
| SUBMISSION DATE 30 SEPTEMBER 1995           |             |                          |           |                 |                    |         |                                       |        |             |
| UNIFORM MANAGEMENT REPORT C                 |             |                          |           |                 |                    |         |                                       |        |             |
| FROM: 60956 DAO CLEVELAND CTR CLAMES        |             |                          |           |                 |                    |         |                                       |        |             |
| TO: 00259 NAVHOSP SAN DIEGO                 |             |                          |           |                 |                    |         |                                       |        |             |
| TOTAL                                       |             |                          |           |                 |                    |         |                                       |        |             |
| 50 FC CAC DESCRIPTION                       | ENROLLMENTS | YTD ACT -- WORK UNITS -- | UNIT COST | PLANNED YTD ACT | PLANNED ANNUAL EXP | EXPENSE | YTD PRIOR YR UNDELIVERED GROSS ADJUST | ORDERS | OBLIGATIONS |
| MC YV 1H60 INFO TECH ADP C                  | T           |                          |           |                 |                    | 7597    |                                       |        | 7597        |
| MC YV 1H60 INFO TECH ADP C                  | W           |                          |           |                 |                    | 12807   |                                       |        | 12807       |
| MC YV 1H60 COST ACCT TOTAL                  |             |                          |           |                 |                    | 20405   |                                       |        | 20405       |
| MC YV 4BAA INTERNAL MEDICI                  | C           | 86                       |           |                 |                    | 2414    |                                       |        | 400         |
| MC YV 4BAA INTERNAL MEDICI                  | Q           |                          |           |                 |                    | 600     |                                       |        | 16136       |
| MC YV 4BAA INTERNAL MEDICI                  | T           |                          |           |                 |                    | 14008   | 328                                   |        | 369246      |
| MC YV 4BAA INTERNAL MEDICI                  | U           | 17924                    |           |                 |                    | 369246  |                                       |        | 742         |
| MC YV 4BAA INTERNAL MEDICI                  | W           |                          |           |                 |                    | 742     |                                       |        | 1386540     |
| MC YV 4BAA INTERNAL MEDICI                  | 1           | 51180                    |           |                 |                    | 8670    |                                       |        | 366925      |
| MC YV 4BAA INTERNAL MEDICI                  | 6           | 52                       |           |                 |                    |         |                                       |        |             |
| MC YV 4BAA COST ACCT TOTAL                  |             | 79242                    | 25499     | 27602           | 13.29              | 176421  | 328                                   |        |             |
| MC YV 4BAB ALLERGY CLINIC                   | C           | 36                       |           |                 |                    | 11892   |                                       |        | 8403        |
| MC YV 4BAB ALLERGY CLINIC                   | T           |                          |           |                 |                    | 3343    | 60                                    |        | 132865      |
| MC YV 4BAB ALLERGY CLINIC                   | U           | 5047                     |           |                 |                    | 132865  |                                       |        | 235         |
| MC YV 4BAB ALLERGY CLINIC                   | W           |                          |           |                 |                    | 235     |                                       |        | 32          |
| MC YV 4BAB ALLERGY CLINIC                   | 1           | 11696                    |           |                 |                    | 224915  |                                       |        | 9475        |
| MC YV 4BAB ALLERGY CLINIC                   | 4           |                          |           |                 |                    |         |                                       |        |             |
| MC YV 4BAB ALLERGY CLINIC                   | 6           | 36                       |           |                 |                    |         |                                       |        |             |
| MC YV 4BAB COST ACCT TOTAL                  |             | 16815                    | 6420      | 6907            | 20.49              | 367757  | 60                                    |        |             |
| MC YV 4BAC CARDIOLOGY CLIN                  | C           | 434                      |           |                 |                    | 34069   |                                       |        | 232240      |
| MC YV 4BAC CARDIOLOGY CLIN                  | P           |                          |           |                 |                    | 183534  | 48706                                 |        | 5084        |
| MC YV 4BAC CARDIOLOGY CLIN                  | Q           |                          |           |                 |                    | 3610    | 1444                                  |        | 34708       |
| MC YV 4BAC CARDIOLOGY CLIN                  | T           |                          |           |                 |                    | 34708   |                                       |        | 135298      |
| MC YV 4BAC CARDIOLOGY CLIN                  | U           | 6107                     |           |                 |                    | 135298  |                                       |        | 8           |
| MC YV 4BAC CARDIOLOGY CLIN                  | 1           | 62251                    |           |                 |                    | 1256737 |                                       |        | 25367       |
| MC YV 4BAC CARDIOLOGY CLIN                  | 4           |                          |           |                 |                    |         |                                       |        |             |
| MC YV 4BAC CARDIOLOGY CLIN                  | 6           | 371                      |           |                 |                    |         |                                       |        |             |
| MC YV 4BAC COST ACCT TOTAL                  |             | 69163                    | 28480     | 48804           | 9.09               | 1673312 | 50150                                 |        | 407308      |
| MC YV 4BAF ENDOCRINOLOGY C                  | P           |                          |           |                 |                    | 223     |                                       |        | 223         |
| MC YV 4BAF ENDOCRINOLOGY C                  | T           |                          |           |                 |                    | 2020    |                                       |        | 2020        |
| MC YV 4BAF ENDOCRINOLOGY C                  | U           |                          |           |                 |                    |         |                                       |        |             |
| MC YV 4BAF ENDOCRINOLOGY C                  | 1           | 6605                     |           |                 |                    | 274310  |                                       |        |             |
| MC YV 4BAF COST ACCT TOTAL                  |             | 8605                     | 3400      | 3538            | .63                | 276553  |                                       |        | 2243        |

Figure 5-3 UMR-C

## **2. Data Collection**

Financial data pertaining to funds appropriated under DHP, Civilian Labor, and Real Property Maintenance are reported on the UMR-C according to SAG/FC/CAC at the expense element level and summarized as:

- Year-to-date(YTD)-expenses
- Undelivered orders - Funds obligated for material or service that has not been received by the activity that ordered it.
- Gross adjusted obligations

Information is also provided for:

- Total consignments - Funds that have been committed for material or service still to be purchased.
- YTD actual manhours - Workload data generated through the MEPRS are reported as YTD actual manhours on the UMR
- Planned and YTD actual work units - Work units provide information on actual work (units) performed for CACs which have been delineated by the BUMED Comptroller as the units of measure for outputs. Planned figures for FY97 are being submitted by NMCSO using actual numbers for FY96.
- Unit cost - The unit cost is computed by summing up the fiscal YTD obligations and expenses for an expense element and dividing this amount by the fiscal YTD actual work units.
- Planned annual expense - FY96 actual expenses are being submitted by NMCSO for FY97 planned expenses.
- Prior year expense - Prior year expense will equal planned expenses figures.



NMCSD developed cost centers patterned after its organization structure at the directorate level (e.g., Director for Medical Services). Separate sub-cost centers are established for each department under each directorate (e.g., Internal Medicine Department). Appendix F lists the CC/SCC used by NMCSD.

Figure 5-3 is part of the end-of-fiscal year (30 September 1995) report. The cost information enclosed in the box is for the Internal Medicine Clinic as indicated by CAC "4BAA" and is classified by expense elements. The Internal Medicine Clinic accumulated 17,924 man hours and \$349,248 in expense element "U" (Personnel compensation and benefits) year-to-date (YTD). Overall, the Internal Medicine Clinic accumulated 79,242 man hours YTD, planned to performed 25,699 work units (Ambulatory visits, as listed in Appendix C), actually performed 27,602 work units, for a unit cost of \$13.29 per ambulatory visit. The total planned expenses is \$321,000 while actual expenses is \$1,764,421.

#### **E. SUMMARY**

The current cost accounting system at NMCSD is designed to accumulate costs according to JONs and to categorize costs by AG/SAG, F/SFC, CAC and EE. The cost system is structured to provide information on how funds are spent by identifying the various operations or tasks performed at NMCSD and the types of resources consumed in the performance of these operations/tasks. The MEPRS and UMR reflect the cost information accumulated in this cost accounting system. The MEPRS provides expense, manpower and workload data related to accomplishing the operations/tasks performed by individual work centers at NMCSD. Cost

information is accumulated for each work center and allocated to final accounts using the stepdown and purification methods. This provides total expenses for the functional categories of inpatient care, ambulatory care, dental care, special programs and readiness.

The UMR collects similar cost data as in the MEPRS for individual CC/SCCs. It provides year-to-date expenses for functions under the cognizance of a Directorate and Department Head. The UMR provides additional information not found in MEPRS such as gross adjusted obligations, consignments, prior year expenses, planned expenses and work units.



## **VI. APPLICATION OF THE MODEL TO THE ACCOUNTING SYSTEM AT NAVAL MEDICAL CENTER SAN DIEGO**

### **A. INTRODUCTION**

This research addresses the question of the need for realignment of the Navy accounting system as an important aspect of the successful implementation of capitation budgeting. An accounting model based on the principles of activity-based costing (ABC) was introduced in Chapter IV as an alternative to the current accounting structure used by MTFs.

The purpose of this chapter is to apply the model of ABC to the current accounting system at NMCS D in order to facilitate the tracking and accumulation of costs associated with performing healthcare services it provides. This chapter begins with a discussion of the cost accumulation and allocation methodologies employed by the current accounting system at NMCS D. Next, the ABC model presented in Chapter IV is applied to the current accounting system to improve the current method of accumulating and allocating cost through MEPRS and the UMR. Finally, a discussion of the conclusions and recommendations formulated through this study are presented.

### **B. ANALYSIS OF COST ACCUMULATION AND ALLOCATION**

Calculation of the cost of providing a service requires determining the chain of activities which make up a particular service. Furthermore, calculation of an activity cost is computed in terms of all traceable factors of production consumed to perform the activity. Therefore, the

various factors or resources used need to be identified for proper accumulation of cost and proportionate allocation of cost through MEPRS and the UMR.

#### **1. Cost accumulation**

Cost information for the calculation of the capitation rate for NMCSO will be collected from its accounting system and the resource information systems reviewed in this research: MEPRS and the UMR. This information is accumulated based on how funds are spent or according to SAG, F/SFC, CAC and EE. This method of classifying cost collects costs by cost elements or at the point where cost occurs without consideration of what drives the cost. This system also groups activities with different cost behavior patterns. For example, the SAG "M9" identifies all costs associated with the operation of a hospital or medical clinic such as supplies, equipment, laboratory, pharmacy, salaries, utilities, and housekeeping. The F/SFC "YG" for laboratory includes costs for supplies, salaries, equipment, maintenance and repair, and services associated with operating a laboratory. The CAC "4BHC" for the optometry clinic collects all the costs of operation. Finally, the expense element "T" identifies costs associated with the purchase of medical/dental supplies.

A MEPRS code is designed to accumulate cost on the basis of the primary function of a work center. For example, MEPRS code "BAA" is used to collect all direct and indirect costs for the Internal Medicine Clinic. It is assigned a performance factor of patient visit which allows for the calculation of a cost per patient visit. However, this does not provide visibility of the resources employed to perform the service(s) the work center provides.

The UMR on the other hand, accumulates costs according to CACs at the expense element level. This method identifies the purpose of a transaction by CACs while the expense element indicates the kinds of resources used. For example, CAC "4BHA" collects costs for the Primary Care Clinic while EE "T" indicates the resources used for supplies. Although the expense elements provide visibility of the kinds of resources consumed by a work center, there does not exist a means of relating how consumption of these resources affects outputs. Therefore, it does not aid in making resource consumption decisions.

What is needed is for the current classification method to provide the detailed information necessary to identify needed managerial decision changes if an MTF commander is to provide a range of healthcare services to a defined population for a fixed amount per beneficiary. Identifying activities focuses on the factors that drive cost and indicates where cost control action is required.

## **2. Cost allocation**

The accuracy of the MEPRS stepdown and purification methods for cost allocation based on the performance factor is questionable because there is no direct relationship between the costs being assigned and the actual resources consumed by a work center in providing services. Measurement of the cost to be assigned is based on the relative volume of services provided instead of the actual amount of resources consumed in providing services.

For example, in Table 6-1, 40 percent of the laboratory workload as measured by MEPRS was performed for Obstetrics while 17 percent can be attributed to Internal Medicine. This is

**Table 6-1 Allocation of laboratory workload rendered to inpatient work centers**

| MEPRS code | Inpatient work center | Total weighted procedure | Percent allocated |
|------------|-----------------------|--------------------------|-------------------|
| AAA        | Internal Med          | 200                      | 17%               |
| ABK        | Urology               | 350                      | 30%               |
| ACB        | Obstetrics            | 450                      | 40%               |
| ADA        | Pediatrics            | 100                      | 9%                |
| AEB        | Podiatry              | <u>50</u>                | <u>4%</u>         |
|            |                       | 1,150                    | 100%              |

used to allocate laboratory cost to these work centers without regard for the actual amount of resources consumed. However, weighted laboratory procedures are not necessarily indicative of the amount of resources used. In general, laboratory services for Internal Medicine patients use more resources than services provided to Obstetrics patients. This method of cost allocation does not provide visibility of the resources consumed which drive cost for a particular work center. Furthermore, analysis of work center expense variances becomes difficult to perform since there is no cause-and-effect relationship between costs and the resources consumed, making it difficult to identify areas of operation for cost control.

The UMR uses work units as the basis for allocating work center cost to outputs. These work units have been determined by the BUMED Comptroller as the appropriate allocation bases for distributing the cost of resources consumed by work centers. The actual relationship of these allocation bases to resources consumed can only be determined after a thorough analysis of the processes performed by the work centers, which is beyond the scope of this research. If ABC is

to be implemented an activity analysis will be necessary to determine the appropriate allocation base which drives cost to facilitate calculating a more accurate cost for services performed by a work center (outputs).

### **C. APPLICATION OF ABC**

The methods for accumulating and allocating cost through the current accounting system does not provide visibility of the actual resources consumed in providing services. The cost accumulation and allocations methods also prevent an accurate measure of resource consumption by work centers and computation of the cost of services.

Table 6-2 provides a side-by-side comparison of the cost accumulation and allocation methodologies employed by MEPRS, UMR and ABC. The information in the table indicates that the application of the ABC model presented in Chapter IV would provide an improvement over the current method of accumulating and allocating cost through MEPRS and the UMR.

#### **1. Activity analysis**

The current accounting system at NMCSO, MEPRS and UMR, do not provide cost information on the basis of the specific tasks or activities performed in work centers. As suggested in Chapter IV, a desirable starting point for defining the activities performed in a work center is the efficiency review records at NMCSO. The efficiency review provides detailed definition of the activities performed by work centers for an understanding of the cost structure in terms of activity consumption. Breaking down a work center into understandable and



**Table 6-2 Cost Accumulation and Allocation Comparison**

| <b>MEPRS</b>  | <b>UMR</b>   | <b>ABC</b>   |
|---|--|--|
| <i>Cost Accumulation</i>  |  |  |
| based on the primary function of a work center  | based on the purpose of a transaction & type of resource | based on activities  |
| no visibility of resources consumed to perform the services the work center provides      | no means of relating resource consumption to outputs     | focuses on factors that drive cost   |
| <i>Cost Allocation</i>  |  |  |
| based on a performance factor   | based on a work unit                                     | based on cost driver   |
| no direct relationship between the costs being assigned and the actual resources consumed | appropriate allocation base?                             | uses cause-and-effect relationship between the resources consumed and specific tasks performed |

manageable activities helps to identify the significant tasks performed to establish a clear and concise basis for determining costs.

Understanding the cost structure of the tasks performed in work centers facilitates proper separation or combination of activities with different cost behavior patterns for a proportional distribution of costs among activities with homogenous inputs and outputs. Decomposing activities in this manner also allows classification of activities as primary or secondary and assists in assigning the cost of secondary activities to primary activities. Furthermore, this highlights non-value added activities which can be eliminated. Additionally, accurately mapping

the activities performed by NMCS D and the associated costs provides more accurate information for calculating a capitation rate.

## **2. Assigning resource costs to activities**

Initial ABC models usually assign resource costs to tasks performed by estimating expenses from the general ledger. Using the NMCS D general ledger as a source of data for calculating healthcare cost prevents an accurate computation of the cost of services. The Navy accounting system accumulates expenses for each work center according to cost elements (i.e., SAGs, F/SFCs, CACs, and EEs) which group activities with different cost behavior patterns. Allocating costs which have been accumulated in this manner does not provide visibility of the actual resources consumed.

Additionally, MEPRS and UMR allocate costs on the basis of a performance factor or work unit, respectively which combine multiple demands for the resources consumed. This also does not allow visibility of the factors of production consumed. Furthermore, this does not provide insight of the elements of work which cause the cost of a given process to change most directly.

Assigning resources costs from the NMCS D general ledger can only be beneficial when expenses with similar behavior are summarized by natural expense categories (i.e., a means of classification that is universal and company-dependent, such as labor, material, utilities, plant and facilities, and information systems). (Brimson, 1991) This would assist in establishing a

cause-and-effect relationship between the resources consumed and the services performed by a work center.

### **3. Defining outputs**

The performance factor and work unit are utilized in MEPRS and UMR respectively, for measuring cost per unit produced in work centers. MEPRS provides a calculation of the cost per disposition and admission while the UMR calculates a unit cost figure per work unit. However, the "output measures" used in MEPRS and the UMR may not be measures of output. The extent that MEPRS and UMR identify outputs produced at NMCSO is limited, including only dispositions, admissions and work units. This certainly does not provide an extensive list of the outputs produced at NMCSO, much less differentiate among the various types of dispositions, admissions and work units.

A starting point for identifying specific outputs at NMCSO is a process analysis to determine the end products of the individual tasks or activities performed in a work center. It is necessary to identify the outputs produced at NMCSO for resources to be proportionately assigned in costing out outputs and for accurately measuring the appropriate capitation rate for NMCSO.

### **4. Assigning activity costs to outputs**

As argued in Chapter IV it is important that approximately 80-90 percent of work center costs are traced to a final cost objective for a clear understanding of the cost structure for providing services. MEPRS allocates cost to a final cost or "revenue producing" account while

the UMR assigns work center expenses to CACs. Cost can be effectively assigned to these final accounts when service costs are proportionally allocated to outputs.

It was shown earlier that MEPRS and UMR do not provide a means for identifying the outputs at NMCSO. Given the lack of output identification costs are currently not being allocated proportionately to outputs. Not allocating costs proportionately to the cost of the output will result in miscalculating the capitation rate.

The ABC model presented in Chapter IV provides a means for tracing activity costs to the final cost objectives. This is achieved using a bill of activities (BOA) that represents the sequence of activities performed and the quantity of each activity consumed in meeting the MTF's mission. For example, the BOA for a laboratory test would indicate each primary activity performed in the process, the cost of each primary activity, and the total cost of activities to produce a test. Similarly, the sequence of activities involved in providing all laboratory services could be represented in a BOA. Accumulating cost information in this manner would provide the MTF commander a clear understanding of the cost structure of the services provided by the organization. Additionally, the BOA would provide greater visibility of possible alternatives to provide healthcare services most cost effectively under a capitated budget.

#### **D. CONCLUSIONS AND RECOMMENDATIONS**

This research attempted to answer two questions with regard to determining the accuracy of NMCSO's accounting system in tracking and accumulating costs for the calculation of a capitation rate. First, what would be an effective and accurate costing system to support the

objectives of the Navy capitation model and provide useful information to capture the total costs of healthcare? Second, does the accounting structure of NMCS D accurately capture costs and permit tracking of costs to services? If not, what alternative costing system would support such objectives?

The BUMED Comptroller has implemented several changes to the cost structure of the accounting system since FY95. These changes were made to separate the readiness and operational costs (CAT I and II) from the cost of peacetime healthcare services (CAT III) in order to avoid inflating the calculation of the capitation rate for an MTF. Costs are still captured based on SAGs, F/SFCs, CACs and EEs. This information is of limited usefulness to an MTF commander to determine where cost control action is required. The current cost tracking system distorts cost because it is assumed that the usage of the cost elements (i.e., SAGs, F/SFCs, CACs, EEs) are proportional to the direct resources consumed (e.g., manhours, ambulatory visits, surgical procedures, and equipment used). Additionally, volume-driven allocation bases are used as the basis for distributing non-volume related costs (e.g., administration, education and training, communication) which results in inaccurately reporting the cost of producing outputs.

This research addressed two additional questions to determine the usefulness of ABC (activity-based costing) for developing an alternative financial model for NMCS D to track and accumulate healthcare costs. First, what advantages does activity-based costing provide in tracking and accumulating costs? Second, will activity-based costing provide an appropriate

measure for primary outputs at NMCS D that would accurately reflect its total cost per output within a capitation budget?

Activity-based costing can provide an MTF commander the information to make needed managerial decision changes within a capitated budget. Activity-based costing is based on the factors that drive cost. An activity-based costing system would accumulate cost according to the activities performed by an MTF making available the appropriate financial information for a more accurate measure of the total cost per output.

The current accounting system used at NMCS D and the resource information systems (MEPRS and the UMR) studied in this research do not provide the MTF commander with the appropriate financial information to make managerial decision changes within a capitated budget. This accounting system will need to be realigned to identify expenses by activities versus cost categories to provide an MTF commander with the information to make decisions at a level at which actions can be taken. Activity-based costing can provide a more accurate measure of the cost of services (outputs) and support an MTF commander in making decisions on actual execution of a capitated budget.



## APPENDIX A

| SAG | DESCRIPTION                               |
|-----|---|
| C1  | Support to Readiness& Other Activities    |
| C2  | Readiness Planning, Exercises, & Training |
| FT  | Hazardous Waste                           |
| FU  | Pollution Prevention-Health Care          |
| FW  | Environmental Conservation-Health Care    |
| FX  | Shore Environmental Protection            |
| Q6  | Environmental Restoration                 |
| RX  | Environmental Protection Projects         |
| FC  | Operation Of Utilities                    |
| FD  | Other Engineering Support                 |
| FE  | Payments To GSA                           |
| FF  | Administration                            |
| FG  | Retail Supply Operations                  |
| FJ  | Bachelor Housing Operation & Furnishing   |
| FK  | Other Personnel Support                   |
| FL  | Morale, Welfare, and Recreation           |
| FN  | Base Communications                       |
| FR  | Other Base Services                       |
| FV  | Physical Security                         |
| V2  | Audiovisual/Visual Information            |
| FA  | Maintenance & Repair of Real Property     |
| FB  | Minor Construction                        |
| LN  | Other Personnel Supp-Care Of The Dead     |
| LR  | Other Personnel Supp-Child Development    |
| EP  | Management Headquarters-Command & Admin   |
| M1  | Naval Healthcare Support Offices          |
| MA  | Education & Training                      |
| MF  | Health Care Precom Prof Scholar Programs  |
| MC  | Medical Centers                           |
| M9  | Station Hospitals & Medical Clinics       |
| 3C  | CHAMPUS                                   |
| 3S  | Health Care Support Contracts             |
| MID | Care In Non-Defense Facilities            |
| ME  | Other Health Activities                   |
| M3  | Military Unique/Other Medical             |
| M2  | Military Public Health                    |
| WH  | Occupational Safety & Health Program      |
| MR  | Dental Care Activities                    |
| RW  | Collateral Equipment                      |
| ZY  | Foreign Currency Fluctuation              |
| 7M  | Servicewide Support                       |





## APPENDIX B

| F/SFC TITLE                        | F/SFC |
|------------------------------------|-------|
| CARE OF DEAD                       | CA    |
| MED CARE IN NONSVC FACILITIES      | C0    |
| REIMBURSABLE COSTS                 | CZ    |
| ADMINISTRATION, GENERAL            | D1    |
| FED EMPLOYEES COMPENSATION         | D3    |
| OTHER ADMINISTRATIVE EXPENSE       | DC    |
| MISSION RELATED SYSTEMS            | DP    |
| REIMBURSABLE COSTS                 | DZ    |
| SUPPLY OPERATIONS                  | E1    |
| REIMBURSABLE COSTS                 | EZ    |
| INITIAL SKILLS TRAINING            | J1    |
| SKILLS PROGRESSION TRAINING        | J2    |
| PROFESSIONAL EDUC & TRAINING       | J3    |
| FUNCTIONAL SKILLS TRAINING         | J4    |
| OP/FLEET EXERCISE/TRAINING         | J5    |
| OTHER TRAINING SUPPORT             | J6    |
| HLTH PROF SCHOLARSHIP PROGRAM      | J7    |
| GRADUATE MEDICAL EDUCATION         | J8    |
| AUGMENTATION OF OCONUS ACTIVITIES  | JA    |
| AUGMENTATION OF HOSPITAL SHIPS     | JB    |
| AUGMENTATION OF FLEET              | JC    |
| AUGMENTATION OF FLEET MARINE FORCE | JD    |
| AUGMENTATION OF FLEET HOSPITAL     | JE    |
| AUGMENTATION OF OTHER SUPPORT SVC  | JF    |
| SUPPORT TO OTHER MIL ACTIVITY      | JG    |
| SUPPORT TO OTHER FED ACTIVITY      | JH    |
| SUPPORT TO NON-FEDERAL ACTIVITY    | JI    |
| SUPP TO NON-MEPRS REPORTING        | JJ    |
| READINESS LOGISTICS                | JK    |
| NAT'L DISASTER MEDICAL SYSTEM      | JL    |
| OCONUS DISASTER/HUMANITARIAN       | JM    |
| DEPLOY PLAN & ADMIN                | JN    |
| REIMBURSABLE COSTS                 | JZ    |
| BASE COMMUNICATIONS                | LA    |
| BASE SERVICES                      | L1    |
| O&M OF TRANSPORTATION EQUIPMENT    | L7    |
| REIMBURSABLE COSTS                 | LZ    |
| RECURRING MAINTENANCE              | M1    |
| NON-RECURRING MAINTENANCE          | M2    |
| REIMBURSABLE COSTS                 | MZ    |
| OPERATION OF UTILITIES             | N1    |
| REIMBURSABLE COSTS                 | NZ    |
| OP,DHP PURCHASES                   | OP    |
| GENERAL ENGINEERING SUPPORT        | P1    |
| TECHNICAL ENGINEERING DIR & SUP    | P5    |
| REIMBURSABLE COSTS                 | PZ    |
| MINOR CONSTR (CO Authority)        | R1    |
| MINOR CONSTR (BUMED Authority)     | R2    |
| REIMBURSABLE COSTS                 | RZ    |
| PERSONNEL SUPPORT                  | S1    |
| NAVY EXCHANGE                      | S2    |

| F/SFC TITLE                     | F/SFC |
|---------------------------------|-------|
| REIMBURSABLE COSTS              | SZ    |
| ADP SUPPORT(NON MISSION)        | V1    |
| REIMBURSABLE COSTS              | VZ    |
| AUTOMATED INFO SYSTEMS MGMT HQ  | W3    |
| AUTOMATED INFO SYSTEMS ACTIVITY | W4    |
| REIMBURSABLE COSTS              | WZ    |
| CLINICAL INVESTIGATION          | YA    |
| CONTINUING MEDICAL EDUCATION    | YB    |
| LECTURES                        | YC    |
| DRUG TESTING                    | YD    |
| PATIENT AFFAIRS                 | YE    |
| NUTRITION MANAGEMENT            | YF    |
| PHARMACY                        | YG    |
| LABORATORY                      | YH    |
| RADIOLOGY                       | YJ    |
| ALCOHOL REHABILITATION          | YK    |
| OCCUPATIONAL HEALTH             | YL    |
| SAFETY                          | YM    |
| JANITORIAL                      | YN    |
| SUPPLEMENTAL CARE               | YP    |
| SPECIAL BUREAU DIRECTED PRGM    | YQ    |
| OTHER OPERATIONS                | YR    |
| HEALTH CARE ADMINISTRATION      | YS    |
| PURCHASED VETERAN ADM HLT CARE  | Y1    |
| INPATIENT CARE                  | YU    |
| AMBULATORY CARE                 | YV    |
| NAVCARE CLINICS                 | YW    |
| MANAGED CARE                    | YX    |
| CHAMPUS(Recapture Prgm)         | YY    |
| AMBULATORY SAME DAY SURGERY     | Y3    |
| REIMBURSABLE COSTS              | YZ    |

# APPENDIX C

## WORK UNITS

| CAC    | CAC DESCRIPTION                                  | WORK UNITS    |
|--------|--|---------------|
| 7110   | TRAINING BUILDINGS                               | 1,000 SQ. FT. |
| 7120   | MAINTENANCE AND PRODUCTION BUILDINGS             | 1,000 SQ. FT. |
| 7130   | RESEARCH AND DEVELOPMENT BUILDINGS               | 1,000 SQ. FT. |
| 7140   | COVERED STORAGE FACILITIES                       | 1,000 SQ. FT. |
| 7150   | MEDICAL BUILDINGS                                | 1,000 SQ. FT. |
| 7160   | ADMINISTRATIVE BUILDINGS                         | 1,000 SQ. FT. |
| 7170   | BACHELOR EM BARRACKS                             | 1,000 SQ. FT. |
| 7190   | BACHELOR HOUSING DET FACILITIES                  | 1,000 SQ. FT. |
| 71A0   | BACHELOR OFFICER QUARTERS                        | 1,000 SQ. FT. |
| 7110   | COMMUNITY BUILDINGS                              | 1,000 SQ. FT. |
| 7410   | IMPROVED GROUNDS                                 | ACRES         |
| 9220   | PEST WEED CONTROL                                | ACRES OF AREA |
| @ 41AA | INTERNAL MEDICINE (ADMISSIONS)                   | ADMISSIONS    |
| @ 41AB | CARDIOLOGY (ADMISSIONS)                          | ADMISSIONS    |
| @ 41AD | DERMATOLOGY (ADMISSIONS)                         | ADMISSIONS    |
| @ 41AE | ENDOCRINOLOGY (ADMISSIONS)                       | ADMISSIONS    |
| @ 41AF | GASTROENTEROLOGY (ADMISSIONS)                    | ADMISSIONS    |
| @ 41AG | HEMATOLOGY (ADMISSIONS)                          | ADMISSIONS    |
| @ 41AI | NEPHROLOGY (ADMISSIONS)                          | ADMISSIONS    |
| @ 41AJ | NEUROLOGY (ADMISSIONS)                           | ADMISSIONS    |
| @ 41AK | ONCOLOGY (ADMISSIONS)                            | ADMISSIONS    |
| @ 41AL | PULMONARY/UPPER RESPIRATORY DISEASE (ADMISSIONS) | ADMISSIONS    |
| @ 41AM | RHEUMATOLOGY (ADMISSIONS)                        | ADMISSIONS    |
| @ 41AN | PHYSICAL MEDICINE (ADMISSIONS)                   | ADMISSIONS    |
| @ 41AP | HIV III (REFERRAL CTBS ONLY) - ADMISSIONS        | ADMISSIONS    |
| @ 41AR | INFECTIOUS DISEASE (ADMISSIONS)                  | ADMISSIONS    |
| @ 41AS | ALLERGY (ADMISSIONS)                             | ADMISSIONS    |
| @ 41BA | GENERAL SURGERY (ADMISSIONS)                     | ADMISSIONS    |
| @ 41BB | CARDIOVASCULAR/THORACIC (ADMISSIONS)             | ADMISSIONS    |
| @ 41BD | NEUROSURGERY (ADMISSIONS)                        | ADMISSIONS    |
| @ 41BE | OPHTHALMOLOGY (ADMISSIONS)                       | ADMISSIONS    |
| @ 41BG | OTORHINOLARYNGOLOGY (ADMISSIONS)                 | ADMISSIONS    |
| @ 41BH | PEDIATRIC SURGERY (ADMISSIONS)                   | ADMISSIONS    |
| @ 41BI | PLASTIC SURGERY (ADMISSIONS)                     | ADMISSIONS    |
| @ 41BJ | PROCTOLOGY (ADMISSIONS)                          | ADMISSIONS    |

|        |  |                   |
|--------|--|-------------------|
| @ 4IBK | UROLOGY (ADMISSIONS)                           | ADMISSIONS        |
| @ 4IBM | BURN UNIT (REFERRAL CENTER ONLY) - ADMISSIONS  | ADMISSIONS        |
| @ 4IBN | PERIPHERAL VASCULAR SURGERY (ADMISSIONS)       | ADMISSIONS        |
| @ 4ICA | GYNECOLOGY (ADMISSIONS)                        | ADMISSIONS        |
| @ 4ICB | OBSTETRICS (ADMISSIONS)                        | ADMISSIONS        |
| @ 4IDA | PEDIATRICS (ADMISSIONS)                        | ADMISSIONS        |
| @ 4IDB | NURSERY (ADMISSIONS)                           | ADMISSIONS        |
| @ 4IDD | ADOLESCENT PEDIATRICS (ADMISSIONS)             | ADMISSIONS        |
| @ 4IEA | ORTHOPEDICS (ADMISSIONS)                       | ADMISSIONS        |
| @ 4IEB | PODIATRY (ADMISSIONS)                          | ADMISSIONS        |
| @ 4IEC | HAND SURGERY (ADMISSIONS)                      | ADMISSIONS        |
| @ 4IFA | PSYCHIATRIC CARE (ADMISSIONS)                  | ADMISSIONS        |
| @ 4IGA | FAMILY PRACTICE MEDICINE (ADMISSIONS)          | ADMISSIONS        |
| @ 4IGB | FAMILY PRACTICE SURGERY (ADMISSIONS)           | ADMISSIONS        |
| @ 4IGC | FAMILY PRACTICE OBSTETRICS (ADMISSIONS)        | ADMISSIONS        |
| @ 4IGD | FAMILY PRACTICE PEDIATRICS (ADMISSIONS)        | ADMISSIONS        |
| @ 4IGE | FAMILY PRACTICE GYNECOLOGY (ADMISSIONS)        | ADMISSIONS        |
| @ 4IGF | FAMILY PRACTICE PSYCHIATRY (ADMISSIONS)        | ADMISSIONS        |
| @ 4IGG | FAMILY PRACTICE ORTHOPEDICS (ADMISSIONS)       | ADMISSIONS        |
| @ 4IGH | FAMILY PRACTICE PEDIATRIC NURSERY (ADMISSIONS) | ADMISSIONS        |
| 4BA6   | MED/DEN MED-OUTPATIENT                         | AMBULATORY VISITS |
| 4BA7   | VA MEDICAL-OUTPATIENT (NO SHARING AGREEMENT)   | AMBULATORY VISITS |
| 4BA9   | CG MEDICAL-OUTPATIENT                          | AMBULATORY VISITS |
| 4BAA   | INTERNAL MEDICINE CLINIC                       | AMBULATORY VISITS |
| 4BAB   | ALLERGY CLINIC                                 | AMBULATORY VISITS |
| 4BAC   | CARDIOLOGY CLINIC                              | AMBULATORY VISITS |
| 4BAE   | DIABETIC CLINIC                                | AMBULATORY VISITS |
| 4BAF   | ENDOCRINOLOGY CLINIC                           | AMBULATORY VISITS |
| 4BAG   | GASTROENTEROLOGY CLINIC                        | AMBULATORY VISITS |
| 4BAH   | HEMATOLOGY CLINIC                              | AMBULATORY VISITS |
| 4BAI   | HYPERTENSION CLINIC                            | AMBULATORY VISITS |
| 4BAJ   | NEPHROLOGY CLINIC                              | AMBULATORY VISITS |
| 4BAK   | NEUROLOGY CLINIC                               | AMBULATORY VISITS |
| 4BAL   | NUTRITION CLINIC                               | AMBULATORY VISITS |
| 4BAM   | ONCOLOGY CLINIC                                | AMBULATORY VISITS |

|        |  |                   |
|--------|--|-------------------|
| 4BAN   | PULMONARY DISEASE CLINIC                       | AMBULATORY VISITS |
| 4BAO   | RHEUMATOLOGY CLINIC                            | AMBULATORY VISITS |
| 4BAP   | DERMATOLOGY CLINIC                             | AMBULATORY VISITS |
| 4BAQ   | INFECTIOUS DISEASE CLINIC                      | AMBULATORY VISITS |
| 4BAR   | PHYSICAL MEDICINE CLINIC                       | AMBULATORY VISITS |
| 4BAW   | HIV INFECTIOUS MEDICINE                        | AMBULATORY VISITS |
| 4BAX   | HIV ALLERGY CLINIC                             | AMBULATORY VISITS |
| 4BAY   | HIV DERMATOLOGY CLINIC                         | AMBULATORY VISITS |
| 4BAZ   | OTHER MEDICAL CARE                             | AMBULATORY VISITS |
| 4BB6   | MED/DEN SURG-OUTPATIENT                        | AMBULATORY VISITS |
| 4BB7   | VA SURG-OUTPATIENT (NO SHARING AGREEMENT)      | AMBULATORY VISITS |
| 4BB9   | CG SURG-OUTPATIENT                             | AMBULATORY VISITS |
| 4BBA   | GENERAL SURGERY CLINIC                         | AMBULATORY VISITS |
| 4BBB   | CARDIOVASCULAR/THORACIC CLINIC                 | AMBULATORY VISITS |
| 4BBC   | NEUROSURGERY CLINIC                            | AMBULATORY VISITS |
| 4BBD   | OPHTHALMOLOGY CLINIC                           | AMBULATORY VISITS |
| 4BBE   | ORGAN TRANSPLANT CLINIC (REFERRAL CENTER ONLY) | AMBULATORY VISITS |
| 4BBF   | OTORHINOLARYNGOLOGY CLINIC                     | AMBULATORY VISITS |
| 4BBG   | PLASTIC SURGERY CLINIC                         | AMBULATORY VISITS |
| 4BBH   | PROCTOLOGY CLINIC                              | AMBULATORY VISITS |
| 4BBI   | UROLOGY CLINIC                                 | AMBULATORY VISITS |
| 4BBJ   | PEDIATRIC SURGERY CLINIC                       | AMBULATORY VISITS |
| 4BBZ   | OTHER SURGICAL CLINICS                         | AMBULATORY VISITS |
| 4BC6   | MED/DEN OB/GYN-OUTPATIENT                      | AMBULATORY VISITS |
| 4BC7   | VA OB/GYN-OUTPATIENT (NO SHARING AGREEMENT)    | AMBULATORY VISITS |
| 4BCA   | FAMILY PLANNING CLINIC                         | AMBULATORY VISITS |
| 4BCB   | GYNCOLOGY CLINIC                               | AMBULATORY VISITS |
| 4BCC   | OBSTETRICS CLINIC                              | AMBULATORY VISITS |
| @ 4BCD | BREAST CARE PREVENTION & DIAGNOSIS             | AMBULATORY VISITS |
| 4BCZ   | OTHER OB/GYN CARE NOT CLASSIFIED ELSEWHERE     | AMBULATORY VISITS |
| 4BD7   | VA PEDIATRIC-OUTPATIENT (NO SHARING AGREEMENT) | AMBULATORY VISITS |
| 4BDA   | PEDIATRIC CLINIC                               | AMBULATORY VISITS |
| 4BDB   | ADOLESCENT CLINIC                              | AMBULATORY VISITS |
| 4BDC   | WELL BABY CLINIC                               | AMBULATORY VISITS |
| 4BDZ   | OTHER PEDIATRIC CLINICS                        | AMBULATORY VISITS |

|      |  |                   |
|------|--|-------------------|
| 4BE6 | MED/DEN ORTHO-OUTPATIENT                         | AMBULATORY VISITS |
| 4BE7 | VA ORTHO-OUTPATIENT (NO SHARING AGREEMENT)       | AMBULATORY VISITS |
| 4BEA | ORTHOPAEDIC CLINIC                               | AMBULATORY VISITS |
| 4BEB | CAST CLINIC                                      | AMBULATORY VISITS |
| 4BEC | HAND SURGERY CLINIC                              | AMBULATORY VISITS |
| 4BEE | ORTHOTIC LABORATORY CLINIC                       | AMBULATORY VISITS |
| 4BEF | PODIATRY CLINIC                                  | AMBULATORY VISITS |
| 4BEZ | CHIROPRACTIC CLINIC (TRI-SERVICE DEMO PROJECT)   | AMBULATORY VISITS |
| 4BF5 | MENTAL HEALTH - OUTPATIENT (TRICARE)             | AMBULATORY VISITS |
| 4BF6 | MED/DEN PSYCH-OUTPATIENT                         | AMBULATORY VISITS |
| 4BF7 | VA PSYCH-OUTPATIENT (NO SHARING AGREEMENT)       | AMBULATORY VISITS |
| 4BFA | PSYCHIATRY CLINIC (NAMI)                         | AMBULATORY VISITS |
| 4BFA | PSYCHIATRY CLINIC                                | AMBULATORY VISITS |
| 4BFB | PSYCHOLOGY CLINIC                                | AMBULATORY VISITS |
| 4BFC | CHILD GUIDANCE CLINIC                            | AMBULATORY VISITS |
| 4BFD | MENTAL HEALTH CLINIC                             | AMBULATORY VISITS |
| 4BFE | SOCIAL WORK SERVICES                             | AMBULATORY VISITS |
| 4BFF | SUBSTANCE ABUSE CLINIC                           | AMBULATORY VISITS |
| 4BFW | FAMILY ADVOCACY PROGRAM                          | AMBULATORY VISITS |
| 4BFX | HIV PSYCHIATRIC CARE                             | AMBULATORY VISITS |
| 4BFY | HIV SOCIAL WORK SERVICES                         | AMBULATORY VISITS |
| 4BFZ | OTHER PSY & MENTAL HLTH NOT CLASSIFIED ELSEWHERE | AMBULATORY VISITS |
| 4BGA | FAMILY PRACTICE CLINIC                           | AMBULATORY VISITS |
| 4BH0 | TRIPRIME CLINICS (TRICARE Outpatient Clinics)    | AMBULATORY VISITS |
| 4BHA | PRIMARY CARE CLINICS                             | AMBULATORY VISITS |
| 4BHB | MEDICAL EXAMINATION CLINIC                       | AMBULATORY VISITS |
| 4BHC | OPTOMETRY CLINIC                                 | AMBULATORY VISITS |
| 4BHD | AUDIOLOGY CLINIC                                 | AMBULATORY VISITS |
| 4BHE | SPEECH PATHOLOGY CLINIC                          | AMBULATORY VISITS |
| 4BHF | COMMUNITY HEALTH CLINIC                          | AMBULATORY VISITS |
| 4BHG | OCCUPATIONAL HEALTH CLINIC                       | AMBULATORY VISITS |
| 4BHH | NAV/CARE CLINICS                                 | AMBULATORY VISITS |
| 4BHI | IMMEDIATE CARE CLINIC                            | AMBULATORY VISITS |
| 4BHZ | OTHER PRIMARY MED CARE NOT CLASSIFIED ELSEWHERE  | AMBULATORY VISITS |
| 4BIA | EMERGENCY MEDICAL CLINIC                         | AMBULATORY VISITS |

## CAC

## CAC DESCRIPTION

## WORK UNITS

|      |  |  |
|------|--|--|
| 4BJA | FLIGHT MEDICINE CLINIC                         | AMBULATORY VISITS                              |
| 4BKA | UNDERSEAS MEDICINE CARE                        | AMBULATORY VISITS                              |
| 4BLA | PHYSICAL THERAPY                               | AMBULATORY VISITS                              |
| 4BLB | OCCUPATIONAL THERAPY                           | AMBULATORY VISITS                              |
| 4BLC | NEUROMUSCULOSKELETAL SCREENING                 | AMBULATORY VISITS                              |
| 4EAB | AMBULATORY DEPRECIATION                        | AMBULATORY VISITS                              |
| 4EKA | OUTPATIENT ADMIN                               | AMBULATORY VISITS - TOTAL                      |
| 87C0 | OTHER UTILITY SYSTEMS                          | AS REQUIRED                                    |
| 4FB8 | HEARING CONSERVATION                           | AUDIOGRAMS PROCESSED                           |
| 1A10 | COMMAND AND EXECUTIVE OFFICES                  | AVERAGE # OF PERSONNEL (CIVILIAN AND MILITARY) |
| 6650 | TOTAL SERVICE CONTRACTS                        | AVERAGE # OF VEHICLES                          |
| 1C50 | PAYROLL  | AVG # OF CIV PERSONNEL ON PAYROLL              |
| 4ADB | NURSERY  | BASSINET DAY                                   |
| 4AGH | FAMILY PRACTICE PEDIATRIC NURSERY              | BASSINET DAY                                   |
| 7730 | POT WATER DIST FACILITIES                      | CAPACITY IN THOUSANDS OF GALLONS               |
| 7510 | REFG EQUIPMENT > 25 TONS                       | CAPACITY IN TONS                               |
| 75K0 | REFG EQUIPMENT 5 TO 25 TONS                    | CAPACITY IN TONS                               |
| 76A0 | AIR-COND 25-100 TONS                           | CAPACITY IN TONS                               |
| 76B0 | AIR-COND 5-25 TONS                             | CAPACITY IN TONS                               |
| 76G0 | AIR-COND 100 TONS OVER                         | CAPACITY IN TONS                               |
| 4CBA | DENTAL LABORATORY (General Procedures)         | COMPOSITE LABORATORY VALUES (CLVs)             |
| 4CBB | DENTAL LABORATORY (Fixed Partial Dentures)     | COMPOSITE LABORATORY VALUES (CLVs)             |
| 4CBC | DENTAL LABORATORY (Removable Partial Dentures) | COMPOSITE LABORATORY VALUES (CLVs)             |
| 4CBD | DENTAL LABORATORY (Complete Dentures)          | COMPOSITE LABORATORY VALUES (CLVs)             |
| 4CBE | DENTAL LABORATORY (Orthodontics)               | COMPOSITE LABORATORY VALUES (CLVs)             |
| 4CBF | DENTAL LABORATORY (Maxillofacial Protheses)    | COMPOSITE LABORATORY VALUES (CLVs)             |
| 4CBG | DENTAL LABORATORY (Miscellaneous)              | COMPOSITE LABORATORY VALUES (CLVs)             |
| 4CBH | DENTAL LABORATORY (Remakes)                    | COMPOSITE LABORATORY VALUES (CLVs)             |
| 4CAA | DENTAL SERVICES (Diagnostic)                   | COMPOSITE TIME VALUES (CTVs)                   |
| 4CAB | DENTAL SERVICES (Preventive)                   | COMPOSITE TIME VALUES (CTVs)                   |
| 4CAC | DENTAL SERVICES (Restorative)                  | COMPOSITE TIME VALUES (CTVs)                   |
| 4CAD | DENTAL SERVICES (Endodontics)                  | COMPOSITE TIME VALUES (CTVs)                   |
| 4CAE | DENTAL SERVICES (Periodontics)                 | COMPOSITE TIME VALUES (CTVs)                   |
| 4CAF | DENTAL SERVICES (Prosthodontics, Removable)    | COMPOSITE TIME VALUES (CTVs)                   |
| 4CAG | DENTAL SERVICES (Oral & Maxillofacial Surgery) | COMPOSITE TIME VALUES (CTVs)                   |



|        |  |   |
|--------|--|---|
| 4CAH   | DENTAL SERVICES (Orthodontics)                     | COMPOSITE TIME VALUES (CTVs)                  |
| 4CAI   | DENTAL SERVICES (Adjunctive General Services)      | COMPOSITE TIME VALUES (CTVs)                  |
| 4DEB   | CENTRAL MATERIAL SERVICE                           | COST OF SUPPLIES AND MINOR PLANT EQUIP ISSUED |
| 9270   | HAZARDOUS WASTE/MATERIAL DISPOSAL                  | CUBIC FOOT                                    |
| 9231   | TRASH WASTE MAT RECYCLE                            | CUBIC YARDS                                   |
| 6A65   | MAINT ANTENNAS SYS                                 | CURRENT PLANT VALUE                           |
| 7520   | LIQUID FUEL DISPENSING                             | CURRENT PLANT VALUE                           |
| 7530   | COMMUNICATION FACILITIES                           | CURRENT PLANT VALUE                           |
| 75A0   | BULK LIQUID FUEL STORAGE                           | CURRENT PLANT VALUE                           |
| 75D0   | OTHER ADMINISTRATIVE STRUCTURES                    | CURRENT PLANT VALUE                           |
| 75G0   | MWR EXTERIOR FACILITIES                            | CURRENT PLANT VALUE                           |
| 75H0   | REFUSE DISPOSAL FACILITIES                         | CURRENT PLANT VALUE                           |
| 7690   | COMPRES AIR PLTS SYSTEMS                           | CURRENT PLANT VALUE                           |
| 76E0   | OTHER MISC UTILITIES                               | CURRENT PLANT VALUE                           |
| 7810   | PREVENTIVE MAINTENANCE INSPECTION                  | CURRENT PLANT VALUE                           |
| 9290   | OTHER MAINTENANCE AND SERVICE                      | CURRENT PLANT VALUE OF BUILDINGS              |
| 9911   | MESS HALLS AND GALLEY                              | DAILY RATIONS ISSUED                          |
| @ 40AA | INTERNAL MEDICINE (DISPOSITIONS)                   | DISPOSITIONS                                  |
| @ 40AB | CARDIOLOGY (DISPOSITIONS)                          | DISPOSITIONS                                  |
| @ 40AD | DERMATOLOGY (DISPOSITIONS)                         | DISPOSITIONS                                  |
| @ 40AE | ENDOCRINOLOGY (DISPOSITIONS)                       | DISPOSITIONS                                  |
| @ 40AF | GASTROENTEROLOGY (DISPOSITIONS)                    | DISPOSITIONS                                  |
| @ 40AG | HEMATOLOGY (DISPOSITIONS)                          | DISPOSITIONS                                  |
| @ 40AI | NEPHROLOGY (DISPOSITIONS)                          | DISPOSITIONS                                  |
| @ 40AJ | NEUROLOGY (DISPOSITIONS)                           | DISPOSITIONS                                  |
| @ 40AK | ONCOLOGY (DISPOSITIONS)                            | DISPOSITIONS                                  |
| @ 40AL | PULMONARY/UPPER RESPIRATORY DISEASE (DISPOSITIONS) | DISPOSITIONS                                  |
| @ 40AM | RHEUMATOLOGY (DISPOSITIONS)                        | DISPOSITIONS                                  |
| @ 40AN | PHYSICAL MEDICINE (DISPOSITIONS)                   | DISPOSITIONS                                  |
| @ 40AP | HIV III (REFERRAL CTRS ONLY) - DISPOSITIONS        | DISPOSITIONS                                  |
| @ 40AR | INFECTIOUS DISEASE (DISPOSITIONS)                  | DISPOSITIONS                                  |
| @ 40AS | ALLERGY (DISPOSITIONS)                             | DISPOSITIONS                                  |
| @ 40BA | GENERAL SURGERY (DISPOSITIONS)                     | DISPOSITIONS                                  |
| @ 40BB | CARDIOVASCULAR/THORACIC (DISPOSITIONS)             | DISPOSITIONS                                  |
| @ 40BD | NEUROSURGERY (DISPOSITIONS)                        | DISPOSITIONS                                  |

WORK UNITS

CAC CAC DESCRIPTION

|        |  |                 |
|--------|--|-----------------|
| @ 40BE | OPHTHALMOLOGY (DISPOSITIONS)                     | DISPOSITIONS    |
| @ 40BG | OTORHINOLARYNGOLOGY (DISPOSITIONS)               | DISPOSITIONS    |
| @ 40BH | PEDIATRIC SURGERY (DISPOSITIONS)                 | DISPOSITIONS    |
| @ 40BI | PLASTIC SURGERY (DISPOSITIONS)                   | DISPOSITIONS    |
| @ 40BJ | PROCTOLOGY (DISPOSITIONS)                        | DISPOSITIONS    |
| @ 40BK | UROLOGY (DISPOSITIONS)                           | DISPOSITIONS    |
| @ 40BM | BURN UNIT (REFERRAL CENTER ONLY) - DISPOSITIONS  | DISPOSITIONS    |
| @ 40BN | PERIPHERAL VASCULAR SURGERY (DISPOSITIONS)       | DISPOSITIONS    |
| @ 40CA | GYNCOLOGY (DISPOSITIONS)                         | DISPOSITIONS    |
| @ 40CB | OBSTETRICS (DISPOSITIONS)                        | DISPOSITIONS    |
| @ 40DA | PEDIATRICS (DISPOSITIONS)                        | DISPOSITIONS    |
| @ 40DB | NURSERY (DISPOSITIONS)                           | DISPOSITIONS    |
| @ 40DD | ADOLESCENT PEDIATRICS (DISPOSITIONS)             | DISPOSITIONS    |
| @ 40EA | ORTHOPEDECS (DISPOSITIONS)                       | DISPOSITIONS    |
| @ 40EB | PODIATRY (DISPOSITIONS)                          | DISPOSITIONS    |
| @ 40EC | HAND SURGERY (DISPOSITIONS)                      | DISPOSITIONS    |
| @ 40FA | PSYCHIATRIC CARE (DISPOSITIONS)                  | DISPOSITIONS    |
| @ 40FB | SUBSTANCE ABUSE REHABILITATION (DISPOSITIONS)    | DISPOSITIONS    |
| @ 40GA | FAMILY PRACTICE MEDICINE (DISPOSITIONS)          | DISPOSITIONS    |
| @ 40GB | FAMILY PRACTICE SURGERY (DISPOSITIONS)           | DISPOSITIONS    |
| @ 40GC | FAMILY PRACTICE OBSTETRICS (DISPOSITIONS)        | DISPOSITIONS    |
| @ 40GD | FAMILY PRACTICE PEDIATRICS (DISPOSITIONS)        | DISPOSITIONS    |
| @ 40GE | FAMILY PRACTICE GYNECOLOGY (DISPOSITIONS)        | DISPOSITIONS    |
| @ 40GF | FAMILY PRACTICE PSYCHIATRY (DISPOSITIONS)        | DISPOSITIONS    |
| @ 40GG | FAMILY PRACTICE ORTHOPEDICS (DISPOSITIONS)       | DISPOSITIONS    |
| @ 40GH | FAMILY PRACTICE PEDIATRIC NURSERY (DISPOSITIONS) | DISPOSITIONS    |
| 63A2   | SEDANS, MID-SIZE                                 | GALLONS OF FUEL |
| 63A3   | SEDANS, SUBCOMPACT                               | GALLONS OF FUEL |
| 63A4   | SEDANS, COMPACT                                  | GALLONS OF FUEL |
| 63A5   | SEDANS, LIGHT                                    | GALLONS OF FUEL |
| 63A6   | SEDANS, MEDIUM                                   | GALLONS OF FUEL |
| 63B0   | BUS 37 PASS UNDER                                | GALLONS OF FUEL |
| 63C0   | BUS 38 PASS OVER                                 | GALLONS OF FUEL |
| 63E0   | STATION WAGONS                                   | GALLONS OF FUEL |
| 63G0   | PICKUP, TRUCK, 1/2 TON                           | GALLONS OF FUEL |

|      |   |                         |
|------|---|-------------------------|
| 63H0 | CARRYALLS ETC                                 | GALLONS OF FUEL         |
| 63J0 | TRUCKS 1.5 TO 2 TONS                          | GALLONS OF FUEL         |
| 63K0 | TRUCKS 2.5 TONS                               | GALLONS OF FUEL         |
| 63M0 | TRUCKS 5 TO 10 TONS                           | GALLONS OF FUEL         |
| 6520 | TRUCKS SPECIAL                                | GALLONS OF FUEL ISSUED  |
| 6530 | FIREFIGHTING EQUIP                            | GALLONS OF FUEL ISSUED  |
| 6540 | MISC EQUIPMENT                                | GALLONS OF FUEL ISSUED  |
| 65R0 | MATERIALS-HANDLING EQUIP                      | GALLONS OF FUEL ISSUED  |
| 65U0 | GROUPS MAINT EQUIPMENT                        | GALLONS OF FUEL ISSUED  |
| 6612 | OPS (FUEL) COSTS COMM RENTED (A-N) VEH        | GALLONS OF FUEL ISSUED  |
| 6614 | OPS (FUEL) COSTS COM RENTED (O-Z) VEH         | GALLONS OF FUEL ISSUED  |
| 6622 | OPS (FUEL) COSTS GSA RENTED (A-N) VEH         | GALLONS OF FUEL ISSUED  |
| 6624 | OPS (FUEL) COSTS GSA RENTED (O-Z) VEH         | GALLONS OF FUEL ISSUED  |
| 4DE2 | CENTRAL OXYGEN SUPPLY SVC                     | HOURS OF SERVICE        |
| 4DEA | CENTRAL STERILE SUPPLY                        | HOURS OF SERVICE        |
| 4DJA | MEDICAL INTENSIVE CARE                        | HOURS OF SERVICE        |
| 4DJB | SURGICAL INTENSIVE CARE                       | HOURS OF SERVICE        |
| 4DJC | CORONARY CARE UNIT                            | HOURS OF SERVICE        |
| 4DJD | NEONATAL INTENSIVE CARE                       | HOURS OF SERVICE        |
| 4DJE | PEDIATRIC INTENSIVE CARE                      | HOURS OF SERVICE        |
| 4DJZ | OTHER INTENSIVE CARE NOT CLASSIFIED ELSEWHERE | HOURS OF SERVICE        |
| 4ECD | MINOR CONSTRUCTION (FREE RECEIPT)             | HOURS OF SERVICE        |
| 4EGA | BIOMEDICAL EQUIP REPAIR - IN HOUSE            | HOURS OF SERVICE        |
| 4EGB | BIOMEDICAL EQUIP REPAIR - CONTRACT            | HOURS OF SERVICE        |
| 4FEA | PATIENT TRANSPORTATION                        | HOURS OF SERVICE        |
| 7610 | ELECTRICITY GENERATING                        | KILOVOLT-AMPERE         |
| 75L0 | SECURITY STRUCTURES                           | LENGTH IN LINEAR FEET   |
| 7710 | ELECTRICAL DISTRIBUTION SYSTEM                | LENGTH IN LINEAR FEET   |
| 7720 | STEAM AND HOT WATER DISTRIBUTION SYS          | LENGTH IN LINEAR FEET   |
| 7740 | POT WATER DIST LINES                          | LENGTH IN LINEAR FEET   |
| 7760 | SEWAGE COLLECTION                             | LENGTH IN LINEAR FEET   |
| 7770 | GAS DISTRIBUTION SYSTEMS                      | LENGTH IN LINEAR FEET   |
| 6A60 | COMMUNICATION LINES                           | LENGTH IN STATUTE MILES |
| 2210 | REQUISITION PROCESSING                        | LINE ITEMS PROCESSED    |
| 2220 | OTHER STOCK CONTROL OPERATIONS                | LINE ITEMS PROCESSED    |

| 2310 | FREIGHT                             | LINE ITEMS RECEIVED                        |
|------|-------------------------------------|--|
| 7450 | DRAINAGE                            | LINEAR FEET                                |
| 7550 | AIRFILED PAVEMENT LIGHTING          | LINEAR FEET                                |
| 7230 | SEAWALLS                            | LINEAR FEET                                |
| 7220 | PIERS                               | LINEAR FEET OF BERTHING SPACE              |
| 6A50 | ADMIN TEL DISTR SYS                 | MAIN STATIONS                              |
| 6A40 | ADMIN TEL PLANTS ETC                | MAIN STATIONS (EACH LINE - A MAIN STATION) |
| 4ECG | TRANSPORTATION (FREE RECEIPT)       | MILES                                      |
| 62A2 | SEDANS, MID-SIZE                    | MILES                                      |
| 62A3 | SEDANS, SUBCOMPACT                  | MILES                                      |
| 62A4 | SEDANS, COMPACT                     | MILES                                      |
| 62A5 | SEDANS, LIGHT                       | MILES                                      |
| 62A6 | SEDANS, MEDIUM                      | MILES                                      |
| 62B0 | BUS 37 PASS UNDER                   | MILES                                      |
| 62C0 | BUS 38 PASS OVER                    | MILES                                      |
| 62E0 | STATION WAGONS                      | MILES                                      |
| 62G0 | PICKUP, TRUCK, 1/2 TON              | MILES                                      |
| 62H0 | CARRYALLS ETC                       | MILES                                      |
| 62I0 | TRUCKS 1 TON                        | MILES                                      |
| 62J0 | TRUCKS 1.5 TO 2 TONS                | MILES                                      |
| 62K0 | TRUCKS 2.5 TONS                     | MILES                                      |
| 62M0 | TRUCKS 5 TO 10 TONS                 | MILES                                      |
| 62N0 | TRUCKS 11 TONS OVER                 | MILES                                      |
| 6611 | MAINT COSTS COMM RENTED (A-N) VEH   | MILES TRAVELED                             |
| 6621 | MAINT COSTS GSA RENTED (A-N) VEH    | MILES TRAVELED                             |
| 9931 | CHAPLAIN'S OFFICE                   | MILITARY POPULATION SERVED                 |
| 9937 | SPECIAL SERVICES                    | MILITARY POPULATION SERVED                 |
| 9962 | MAINTENANCE AND REPAIR OF PSE       | MILITARY POPULATION SERVED                 |
| 99C1 | NAVY MIL REC FUNDS, ASHORE          | MILITARY POPULATION SERVED                 |
| 8110 | S/HW, 750,000 TO 3,500,000 BTU/HR   | MILLIONS OF BTU'S (MBTU)                   |
| 8210 | S/HW OVER 3,500,000 BTU/HR, PROD PL | MILLIONS OF BTU'S (MBTU)                   |
| 8220 | STEAM & HOT WATER DIST SYSTEMS      | MILLIONS OF BTU'S (MBTU)                   |
| 8250 | PUR S/HW COMMERCIAL                 | MILLIONS OF BTU'S (MBTU)                   |
| 8260 | PUR STEAM S/HW NAVACT               | MILLIONS OF BTU'S (MBTU)                   |
| 8270 | PUR S/HW OTHER                      | MILLIONS OF BTU'S (MBTU)                   |

# CAC CAC DESCRIPTION WORK UNITS

|      |  |   |
|------|--|---|
| 8750 | GAS PLANTS                                 | MILLIONS OF BTU'S (MBTU)                                    |
| 8760 | GAS DISTR SYSTEM                           | MILLIONS OF BTU'S (MBTU)                                    |
| 87H0 | FUELS ISSUED - PLANTS UNDER 750K BTU/HR    | MILLIONS OF BTU'S (MBTU)                                    |
| 87J0 | PURCHASED GAS - COMMERCIAL                 | MILLIONS OF BTU'S (MBTU)                                    |
| 87K0 | PURCHASED GAS - NAVY                       | MILLIONS OF BTU'S (MBTU)                                    |
| 87M0 | PURCHASED GAS - OTHER                      | MILLIONS OF BTU'S (MBTU)                                    |
| 8320 | ELEC PLANT OP DIESEL GAS                   | MILLIONS OF WATTHOURS (MWH)                                 |
| 8330 | ELEC DISTR SYSTEMS OPS                     | MILLIONS OF WATTHOURS (MWH)                                 |
| 8350 | PUR ELEC COMMERCIAL                        | MILLIONS OF WATTHOURS (MWH)                                 |
| 8360 | PURCHASED ELECTRICITY - NAVY               | MILLIONS OF WATTHOURS (MWH)                                 |
| 8370 | PURCHASED ELECTRICITY - OTHER              | MILLIONS OF WATTHOURS (MWH)                                 |
| 4DFA | ANESTHESIOLOGY                             | MINUTES OF SERVICE  |
| 4DFB | SURGICAL SUITE                             | MINUTES OF SERVICE  |
| 4DFC | POST ANESTHESIA CARE UNIT                  | MINUTES OF SERVICE  |
| 4DGA | AMBULATORY PROCEDURE UNIT                  | MINUTES OF SERVICE  |
| 4DGB | HEMODIALYSIS                               | MINUTES OF SERVICE  |
| 4DGC | HYPERBARIC MEDICINE                        | MINUTES OF SERVICE  |
| 4DGD | PERITONEAL DIALYSIS                        | MINUTES OF SERVICE  |
| 4DGE | AMBULATORY NURSING SERVICES                | MINUTES OF SERVICE  |
| 4FDC | NONPATIENT FOOD OPERATIONS                 | NON PATIENT RATIONS SERVED                                  |
| 6290 | ACCIDENT COSTS FOR ADMIN VEH               | NUMBER OF ACCIDENTS   |
| 7430 | SEMI-IMPROVED GROUNDS                      | NUMBER OF ACRES   |
| 7440 | UNIMPROVED GROUNDS                         | NUMBER OF ACRES   |
| 1A30 | PUBLIC AFFAIRS OFFICES                     | NUMBER OF ACTIONS COMPLETED                                 |
| 4FBJ | EARLY INTERVENTION SERVICES                | NUMBER OF ACTIVE INDIVIDUALIZED FAMILY SERVICE PLANS (IFSP) |
| 2330 | HOUSEHOLD GOODS                            | NUMBER OF APPLICATIONS                                      |
| 4EJ6 | TRI-SVC PATIENT APPOINTMENT & SCH (TRIPAS) | NUMBER OF APPOINTMENTS                                      |
| 7820 | EMERG SER REAL PROP                        | NUMBER OF CALLS   |
| 7830 | EMERG SVC REL PROP UTIL SYSTEMS            | NUMBER OF CALLS   |
| 9250 | EMER SERV WORK NON REAL PROP               | NUMBER OF CALLS   |
| 1A40 | LEGAL OFFICE                               | NUMBER OF CASES COMPLETED DURING REPORTING PERIOD           |
| 4M50 | CONTINUING EDUC - CIVILIAN                 | NUMBER OF CIV PERSONNEL TRAINED                             |
| 1D10 | ADMINISTRATION (CIVILIAN PERSONNEL)        | NUMBER OF CIVILIAN EMPLOYEES                                |
| 1D40 | EMPLOYEE REL (LABOR REL PRGM)              | NUMBER OF CIVILIAN EMPLOYEES                                |
| 1D50 | EMPLOYEE SERVICES                          | NUMBER OF CIVILIAN EMPLOYEES                                |

|        |  |   |
|--------|--|---|
| 1D80   | CIV TVL/HHG MOVE                           | NUMBER OF CIVILIAN PERSONNEL MOVED                    |
| 4CA2   | MED/DEN DENTAL CARE                        | NUMBER OF CLAIMS PROCESSED                            |
| 4CA4   | VA DENTAL CARE (NO SHARING AGREEMENT)      | NUMBER OF CLAIMS PROCESSED                            |
| 4EB5   | 3RD PARTY LIABILITY                        | NUMBER OF CLAIMS PROCESSED                            |
| 4EBH   | 3RD PARTY COLLECTION                       | NUMBER OF CLAIMS PROCESSED                            |
| 1D30   | WAGE AND CLASSIFICATION                    | NUMBER OF CLASSIFICATIONS OR REVIEWS COMPLETED        |
| 4FA7   | DRUG LABORATORY CONFIRMATION OPERATIONS    | NUMBER OF CONFIRMATION PROCEDURES PERFORMED           |
| 2850   | CONTRACTOR PAYMENT                         | NUMBER OF CONTRACTOR'S INVOICES PROCESSED FOR PAYMENT |
| 2820   | CONTRACT ADMINISTRATION                    | NUMBER OF CONTRACTS REQUIRING CONTRACT ADMIN ACTION   |
| 4FAP   | DRUG LABORATORY LEGAL SUPPORT              | NUMBER OF DAYS TAD                                    |
| @ 4FB5 | CONSOLIDATED INDUSTRIAL HYGIENE LAB (CIHL) | NUMBER OF DETERMINATIONS                              |
| 1C40   | ACCOUNTING                                 | NUMBER OF DOCUMENTS PROCESSED                         |
| 4FAF   | DRUG LABORATORY DATA SUPPORT OPERATIONS    | NUMBER OF DOCUMENTS PROCESSED                         |
| 4FDH   | MILITARY FUNDED EMERGENCY LEAVE            | NUMBER OF EMERGENCY LEAVE PAID                        |
| 4R00   | SEPARATION INCENTIVES                      | NUMBER OF EMPLOYEES GRANTED SEPARATION                |
| 1E30   | ENLISTED PERSONNEL RECORDS                 | NUMBER OF ENLISTED PERSONNEL RECORDS                  |
| 1H30   | ADP OPERATIONS                             | NUMBER OF EQUIPMENT OPERATING HOURS                   |
| 4201   | NURSE CORPS BOARD CERTIFICATION            | NUMBER OF EXAMS TAKEN                                 |
| 4202   | MEDICAL CORPS BOARD CERTIFICATION          | NUMBER OF EXAMS TAKEN                                 |
| 4203   | MEDICAL SERVICE CORP BOARD CERTIFICATION   | NUMBER OF EXAMS TAKEN                                 |
| 4204   | DENTAL CORPS BOARD CERTIFICATION           | NUMBER OF EXAMS TAKEN                                 |
| 4205   | PHYSICIAN ASSISTANT CERTIFICATION          | NUMBER OF EXAMS TAKEN                                 |
| 7790   | FIRE ALARMS                                | NUMBER OF FIRE ALARM BOXES                            |
| 9380   | FIRE PROTECTION, STRUCTURAL                | NUMBER OF FIRE FIGHTERS ASSIGNED                      |
| 9390   | FIRE, AIRCRAFT, AND RESCUE                 | NUMBER OF FIRE FIGHTERS ASSIGNED                      |
| 4FBI   | IMMUNIZATIONS CLINIC                       | NUMBER OF IMMUNIZATION/SCREENING TESTS                |
| 4FA6   | DRUG LABORATORY IMMUNOASSAY OPERATIONS     | NUMBER OF IMMUNOASSAYS PERFORMED                      |
| 92B0   | MAINT DEHUMID EQP                          | NUMBER OF ITEMS                                       |
| 92D0   | MAINT REP RFG OVER 5 TN                    | NUMBER OF ITEMS                                       |
| 1J30   | GRAPHIC ARTS                               | NUMBER OF ITEMS COMPLETED DURING THE REPORTING PERIOD |
| 2110   | RECEIPT                                    | NUMBER OF LINE ITEMS                                  |
| 2124   | SHIPPING                                   | NUMBER OF LINE ITEMS                                  |
| 2130   | STORAGE SUPPORT                            | NUMBER OF LINE ITEMS                                  |
| 6A45   | LEAS COMM CIRC/MOD                         | NUMBER OF LOCALLY LEASED CIRCUITS                     |
| 9260   | INTRASTATION MOVES                         | NUMBER OF MOVES                                       |

|        |   |   |
|--------|---|---|
| 1E20   | OFFICER PERSONNEL RECORDS                         | NUMBER OF OFFICERS' RECORDS                       |
| 6A80   | TELEPHONE   | NUMBER OF OFF-STATION CALLS                       |
| 92F0   | ELEVATOR OPERATION                                | NUMBER OF OPERATORS                               |
| 1J10   | PRINTING AND REPRODUCTION                         | NUMBER OF PAGES PRODUCED                          |
| 1D20   | EMPLOYMENT  | NUMBER OF PERSONNEL ACTIONS/ REQUEST              |
| 4M60   | PROFESSIONAL SKILLS (NON CR)                      | NUMBER OF PERSONNEL TRAINED                       |
| 4M71   | CME - MED CORPS                                   | NUMBER OF PERSONNEL TRAINED                       |
| 4M72   | CME - MED SERV CORPS                              | NUMBER OF PERSONNEL TRAINED                       |
| 4M73   | CME - DENTAL CORPS                                | NUMBER OF PERSONNEL TRAINED                       |
| 4M74   | CME - NURSE CORPS                                 | NUMBER OF PERSONNEL TRAINED                       |
| 4M75   | CME - INDEPENDENT DUTY CORPMEN                    | NUMBER OF PERSONNEL TRAINED                       |
| 6B70   | PHOTOGRAPHIC SERVICES                             | NUMBER OF PICTURES                                |
| 1C20   | COMMAND EVALUATION                                | NUMBER OF PROCEDURAL STUDIES AND AUDITS COMPLETED |
| 4DDA   | ELECTROCARDIOGRAPHY                               | NUMBER OF PROCEDURES                              |
| 4ddb   | ELECTROENCEPHALOGRAPHY                            | NUMBER OF PROCEDURES                              |
| 4DDC   | ELECTRONEUROMYOGRAPHY                             | NUMBER OF PROCEDURES                              |
| 4DDZ   | OTHER SPEC PROCEDURES NOT CLASSIFIED ELSEWHERE    | NUMBER OF PROCEDURES                              |
| 4FA5   | DRUG LABORATORY ACCESSIONING OPERATIONS           | NUMBER OF SAMPLES RECEIVED                        |
| 4FAC   | OPHTHAL FAB AND REPAIR                            | NUMBER OF SPECTACLES PRODUCED/REPAIRED            |
| @ 4633 | SURFACE FORCE MEDICAL INDOCTRINATION COURSE       | NUMBER OF STUDENTS                                |
| @ 4634 | SPECIAL OPERATIONS COMBAT MEDICINE COURSE         | NUMBER OF STUDENTS                                |
| @ 4635 | ADVANCE SPECIAL OPERATIONS COMBAT MEDICINE COURSE | NUMBER OF STUDENTS                                |
| 4FAK   | STUDENT EXP CLASSROOM/OTHER LEARNING              | NUMBER OF STUDENTS                                |
| 1D60   | TRAINING OFFICE, CCPO                             | NUMBER OF STUDENTS ENROLLED                       |
| 1E40   | TRAINING OFFICE, MILITARY                         | NUMBER OF STUDENTS ENROLLED                       |
| 4501   | COLD WEATHER MEDICINE TRAINING                    | NUMBER OF STUDENTS TRAINED                        |
| 4502   | MMART TRAINING                                    | NUMBER OF STUDENTS TRAINED                        |
| 4503   | MED EFFECTS OF NUCLEAR WEAPONS TRNG               | NUMBER OF STUDENTS TRAINED                        |
| 4504   | COMBAT CASUALTY CARE COURSE                       | NUMBER OF STUDENTS TRAINED                        |
| 4505   | MED MGMT OF CHEMICAL CASUALTIES COURSE            | NUMBER OF STUDENTS TRAINED                        |
| 4506   | OPERATING FORCES MGMT SEMINAR                     | NUMBER OF STUDENTS TRAINED                        |
| 4507   | INTERAGENCY TRAINING                              | NUMBER OF STUDENTS TRAINED                        |
| 4508   | BLOOD BANK TRAINING                               | NUMBER OF STUDENTS TRAINED                        |
| 4509   | PRACTICAL COMPTROLLERSHIP COURSE                  | NUMBER OF STUDENTS TRAINED                        |
| 4510   | ARMY-BAYLOR PRECEPTOR TRAINING                    | NUMBER OF STUDENTS TRAINED                        |

## CAC

## CAC DESCRIPTION

## WORK UNITS

|      |  |                            |
|------|--|----------------------------|
| 4511 | MEDICAL LOGISTICS COURSE                       | NUMBER OF STUDENTS TRAINED |
| 4512 | SHORE STATION MANAGEMENT TRAINING              | NUMBER OF STUDENTS TRAINED |
| 4601 | MEDICAL REGULATING COURSE                      | NUMBER OF STUDENTS TRAINED |
| 4602 | MEDICINE IN THE TROPICS COURSE                 | NUMBER OF STUDENTS TRAINED |
| 4603 | JOINT MEDICAL PLANNERS COURSE                  | NUMBER OF STUDENTS TRAINED |
| 4604 | PLAN, OPS, AND MED INTELLIGENCE COURSE         | NUMBER OF STUDENTS TRAINED |
| 4605 | SURFACE WARFARE MED ORCR INDOCTRINATION COURSE | NUMBER OF STUDENTS TRAINED |
| 4607 | STRATEGIC MED READINESS CONTINGENCY COURSE     | NUMBER OF STUDENTS TRAINED |
| 4608 | QUALITY ASSURANCE/RISK MGMT COURSE             | NUMBER OF STUDENTS TRAINED |
| 4609 | MANAGEMENT DEVELOPMENT COURSE                  | NUMBER OF STUDENTS TRAINED |
| 4610 | SUPERVISORY SKILLS COURSE                      | NUMBER OF STUDENTS TRAINED |
| 4611 | SENIOR NAVY LEADER DEVELOPMENT COURSE          | NUMBER OF STUDENTS TRAINED |
| 4612 | MEDICAL DEPARTMENT HEAD COURSE                 | NUMBER OF STUDENTS TRAINED |
| 4613 | COMMAND NAVY LEADER DEVELOPMENT COURSE         | NUMBER OF STUDENTS TRAINED |
| 4614 | INTERMEDIATE NAVY LEADER DEV COURSE            | NUMBER OF STUDENTS TRAINED |
| 4615 | HEALTH RESOURCES MGMT COURSE                   | NUMBER OF STUDENTS TRAINED |
| 4616 | TOTAL QUALITY LEADERSHIP DEPT HEAD COURSE      | NUMBER OF STUDENTS TRAINED |
| 4617 | NAV MED QUAL INST PLAN FOR QUAL TRNG           | NUMBER OF STUDENTS TRAINED |
| 4618 | NAV MED QUAL INST EXE STEERING COMM TRNG       | NUMBER OF STUDENTS TRAINED |
| 4619 | NAV MED QUAL INST FACILITATOR COURSE           | NUMBER OF STUDENTS TRAINED |
| 4620 | DESIGNING EFFECT EDUC PRGM FOR MED DEPT PERSON | NUMBER OF STUDENTS TRAINED |
| 4621 | NAV MED QUAL INST CUSTOMER SATISFACTION        | NUMBER OF STUDENTS TRAINED |
| 4622 | NAV MED QUAL INST SENIOR MGMT COURSE           | NUMBER OF STUDENTS TRAINED |
| 4623 | NAV MED QUAL INST TEAM BUILDING WKSHOP         | NUMBER OF STUDENTS TRAINED |
| 4624 | MANPOWER MANAGEMENT COURSE                     | NUMBER OF STUDENTS TRAINED |
| 4625 | FINANCIAL AND MATERIAL MGMT COURSE             | NUMBER OF STUDENTS TRAINED |
| 4626 | PATIENT ADMINISTRATION COURSE                  | NUMBER OF STUDENTS TRAINED |
| 4627 | GAS FREE ENGINEERING COURSE                    | NUMBER OF STUDENTS TRAINED |
| 4628 | NURSE CORPS OPERATING ROOM ORIENT COURSE       | NUMBER OF STUDENTS TRAINED |
| 4629 | OPERATIONAL ENTOMOLOGY TRAINING                | NUMBER OF STUDENTS TRAINED |
| 4630 | CASUALTY TREATMENT TRAINING                    | NUMBER OF STUDENTS TRAINED |
| 4655 | DENTAL OFFICER SHORT COURSES                   | NUMBER OF STUDENTS TRAINED |
| 4657 | DENTAL TECHNICIAN SHORT COURSES                | NUMBER OF STUDENTS TRAINED |
| 4FA1 | HIV PROFESSIONAL TRAINING                      | NUMBER OF STUDENTS TRAINED |
| 4FA2 | OCCUPATIONAL HEALTH TRAINING                   | NUMBER OF STUDENTS TRAINED |



|      |   |   |
|------|---|---|
| 4FA3 | PREVENTIVE MEDICINE TRAINING                | NUMBER OF STUDENTS TRAINED                    |
| 4M81 | RAPID DEPLOY OF MEDICAL FORCES TRAINING     | NUMBER OF STUDENTS TRAINED                    |
| 4M82 | FLEET HOSPITAL TRAINING (PHASE I)           | NUMBER OF STUDENTS TRAINED                    |
| 4M84 | FLEET HOSPITAL TRAINING (PHASE II)          | NUMBER OF STUDENTS TRAINED                    |
| 4FAH | CLINICAL INVESTIGATIONS                     | NUMBER OF STUDIES                             |
| 6A70 | MAINT ADMIN TEL                             | NUMBER OF TELEPHONES                          |
| 2320 | PASSENGERS                                  | NUMBER OF TRANS REQUEST(SF 1169) (TR'S)ISSUED |
| 1C70 | DISBURSING                                  | NUMBER OF TRANSACTIONS                        |
| 6440 | MISC EQUIP                                  | NUMBER OF UNITS                               |
| 64T0 | CONSTRUCTION EQP NOT REQUIRED               | NUMBER OF UNITS                               |
| 6420 | TRUCKS SPECIAL                              | NUMBER OF VEHICLES                            |
| 64P0 | TRAILERS                                    | NUMBER OF VEHICLES                            |
| 1A20 | RECEPTION OFFICE                            | NUMBER OF VISITORS                            |
| 4FAT | OPERATIONAL PSYCHOLOGY (NAMI)               | NUMBER TESTS/ANALYSES CONDUCTED               |
| 4FEC | TRANSIENT PATIENT CARE                      | OBDs DAYS BY TRANSIENT PATIENT                |
| 4AA6 | MED/DEN MED - INPATIENT                     | OCCUPIED BED DAYS                             |
| 4AA7 | VA MEDICAL-INPATIENT (NO SHARING AGREEMENT) | OCCUPIED BED DAYS                             |
| 4AAA | INTERNAL MEDICINE                           | OCCUPIED BED DAYS                             |
| 4AAB | CARDIOLOGY                                  | OCCUPIED BED DAYS                             |
| 4AAD | DERMATOLOGY                                 | OCCUPIED BED DAYS                             |
| 4AAE | ENDOCRINOLOGY                               | OCCUPIED BED DAYS                             |
| 4AAF | GASTROENTEROLOGY                            | OCCUPIED BED DAYS                             |
| 4AAG | HEMATOLOGY                                  | OCCUPIED BED DAYS                             |
| 4AAI | NEPHROLOGY                                  | OCCUPIED BED DAYS                             |
| 4AAJ | NEUROLOGY                                   | OCCUPIED BED DAYS                             |
| 4AAK | ONCOLOGY                                    | OCCUPIED BED DAYS                             |
| 4AAL | PULMONARY/UPPER RESPIRATORY DISEASE         | OCCUPIED BED DAYS                             |
| 4AAM | RHEUMATOLOGY                                | OCCUPIED BED DAYS                             |
| 4AAN | PHYSICAL MEDICINE                           | OCCUPIED BED DAYS                             |
| 4AAP | HIV III (REFERRAL CTRS ONLY)                | OCCUPIED BED DAYS                             |
| 4AAR | INFECTIOUS DISEASE                          | OCCUPIED BED DAYS                             |
| 4AAS | ALLERGY                                     | OCCUPIED BED DAYS                             |
| 4AAX | HIV MEDICAL CARE                            | OCCUPIED BED DAYS                             |
| 4AAZ | OTHER MEDICAL CARE                          | OCCUPIED BED DAYS                             |
| 4AB6 | MED/DEN SURG-INPATIENT                      | OCCUPIED BED DAYS                             |

CAC CAC DESCRIPTION

|      |   |                   |
|------|---|-------------------|
| 4AB7 | VA SURGICAL-INPATIENT (NO SHARING AGREEMENT)    | OCCUPIED BED DAYS |
| 4ABA | GENERAL SURGERY                                 | OCCUPIED BED DAYS |
| 4ABB | CARDIOVASCULAR/THORACIC                         | OCCUPIED BED DAYS |
| 4ABD | NEUROSURGERY                                    | OCCUPIED BED DAYS |
| 4ABE | OPHTHALMOLOGY                                   | OCCUPIED BED DAYS |
| 4ABF | ORAL SURGERY (MEDICAL TREATMENT FACILITY)       | OCCUPIED BED DAYS |
| 4ABG | OTORHINOLARYNGOLOGY                             | OCCUPIED BED DAYS |
| 4ABH | PEDIATRIC SURGERY                               | OCCUPIED BED DAYS |
| 4ABI | PLASTIC SURGERY                                 | OCCUPIED BED DAYS |
| 4ABJ | PROCTOLOGY                                      | OCCUPIED BED DAYS |
| 4ABK | UROLOGY   | OCCUPIED BED DAYS |
| 4ABM | BURN UNIT (REFERRAL CENTER ONLY)                | OCCUPIED BED DAYS |
| 4ABN | PERIPHERAL VASCULAR SURGERY                     | OCCUPIED BED DAYS |
| 4ABZ | OTHER SURGICAL CARE                             | OCCUPIED BED DAYS |
| 4AC6 | MED/DEN OB/GYN-INPATIENT                        | OCCUPIED BED DAYS |
| 4AC7 | VA OB/GYN-INPATIENT (NO SHARING AGREEMENT)      | OCCUPIED BED DAYS |
| 4ACA | GYNECOLOGY                                      | OCCUPIED BED DAYS |
| 4ACB | OBSTETRICS                                      | OCCUPIED BED DAYS |
| 4ADA | PEDIATRICS                                      | OCCUPIED BED DAYS |
| 4ADD | ADOLESCENT PEDIATRICS                           | OCCUPIED BED DAYS |
| 4ADZ | OTHER PEDIATRIC CARE                            | OCCUPIED BED DAYS |
| 4AE6 | MED/DEN ORTHO-INPATIENT                         | OCCUPIED BED DAYS |
| 4AE7 | VA ORTHO-INPATIENT (NO SHARING AGREEMENT)       | OCCUPIED BED DAYS |
| 4AEA | ORTHOPEDICS                                     | OCCUPIED BED DAYS |
| 4AEB | PODIATRY  | OCCUPIED BED DAYS |
| 4AEC | HAND SURGERY                                    | OCCUPIED BED DAYS |
| 4AEZ | OTHER ORTHOPEDIC CARE NOT CLASSIFIED ELSEWHERE  | OCCUPIED BED DAYS |
| 4AF5 | MENTAL HEALTH - INPATIENT (TRICARE)             | OCCUPIED BED DAYS |
| 4AF6 | MED/DEN PSYCH-INPATIENT                         | OCCUPIED BED DAYS |
| 4AF7 | VA PSYCH-INPATIENT (NO SHARING AGREEMENT)       | OCCUPIED BED DAYS |
| 4AF8 | ST E PSYCH-INPATIENT                            | OCCUPIED BED DAYS |
| 4AFA | PSYCHIATRIC CARE                                | OCCUPIED BED DAYS |
| 4AFB | SUBSTANCE ABUSE REHABILITATION                  | OCCUPIED BED DAYS |
| 4AFZ | OTHER PSYCHIATRIC CARE NOT CLASSIFIED ELSEWHERE | OCCUPIED BED DAYS |
| 4AGA | FAMILY PRACTICE MEDICINE                        | OCCUPIED BED DAYS |

|      |  |                                 |
|------|--|---------------------------------|
| 4AGB | FAMILY PRACTICE SURGERY                        | OCCUPIED BED DAYS               |
| 4AGC | FAMILY PRACTICE OBSTETRICS                     | OCCUPIED BED DAYS               |
| 4AGD | FAMILY PRACTICE PEDIATRICS                     | OCCUPIED BED DAYS               |
| 4AGE | FAMILY PRACTICE GYNECOLOGY                     | OCCUPIED BED DAYS               |
| 4AGF | FAMILY PRACTICE PSYCHIATRY                     | OCCUPIED BED DAYS               |
| 4AGO | FAMILY PRACTICE ORTHOPEDICS                    | OCCUPIED BED DAYS               |
| 4AGZ | OTHER FAMILY PRACTICE NOT CLASSIFIED ELSEWHERE | OCCUPIED BED DAYS               |
| 4EAA | INPATIENT DEPRECIATION                         | OCCUPIED BED DAYS               |
| 4EJA | INPATIENT ADMIN                                | OCCUPIED BED DAYS - TOTAL       |
| 6430 | FIREFIGHTING EQUIP                             | OPERATING HOURS                 |
| 64R0 | MATERIAL-HANDLING EQUIP                        | OPERATING HOURS                 |
| 64U0 | GROUNDS MAINT EQUIPMENT                        | OPERATING HOURS                 |
| 64Y0 | WEIGHT-HANDLING EQUIPMENT                      | OPERATING HOURS                 |
| 4EIA | PATIENT FOOD OPERATIONS                        | PATIENT MEAL DAYS SERVED        |
| 4FB7 | ASBESTOS MED SURVE PROG                        | PATIENT VISITS                  |
| 1D70 | SAFETY   | POPULATION SERVED               |
| 9964 | LIBRARY, GENERAL                               | POPULATION SERVED               |
| 4EHA | LAUNDRY - IN HOUSE                             | POUNDS PROCESSED                |
| 4EHB | LAUNDRY - CONTRACT                             | POUNDS PROCESSED                |
| 2720 | CONTRACT EXECUTION                             | PROCUREMENT ACTION PROCESSED    |
| 2710 | PROCUREMENT PLANNING                           | PROCUREMENT LINE ITEM PROCESSED |
| 4ECA | PLANT MANAGEMENT (FREE RECEIPT)                | SQUARE FEET                     |
| 4ECB | OPERATION OF UTILITIES (FREE RECEIPT)          | SQUARE FEET                     |
| 4ECE | OTHER ENGINEERING SUPPORT (FREE RECEIPT)       | SQUARE FEET                     |
| 4ECH | FIRE PROTECTION (FREE RECEIPT)                 | SQUARE FEET                     |
| 4ECI | POLICE PROTECTION (FREE RECEIPT)               | SQUARE FEET                     |
| 4EFA | CUSTODIAL SERVICES - IN HOUSE                  | SQUARE FEET CLEANED             |
| 4EFB | CUSTODIAL SERVICES - CONTRACT                  | SQUARE FEET CLEANED             |
| 4ECF | LEASES OF REAL PROPERTY (FREE RECEIPT)         | SQUARE FEET LEASED              |
| 4ECC | MAINT. OF REAL PROPERTY (FREE RECEIPT)         | SQUARE FEET/ HRS OF SVC         |
| 7330 | OTHER AIRFIELD PAVEMENTS                       | SQUARE YARDS                    |
| 7350 | SIDEWALKS OTHER PAVEMENTS                      | SQUARE YARDS                    |
| 9240 | EXTERIOR CLEAN-UP                              | SQUARE YARDS                    |
| 7310 | ROADS AND STREETS                              | SQUARE YARDS OF TRAFFIC AREAS   |
| 4101 | GENERAL DUTY HOSP CORPSMEN TRNG                | STUDENT AVERAGE ON BOARD        |

# CAC CAC DESCRIPTION WORK UNITS

|      |  |                             |
|------|--|-----------------------------|
| 4170 | BASIC DENTAL ASSISTANT TRAINING            | STUDENT AVERAGE ON BOARD    |
| 4301 | INSERVICE PROCUREMENT PROGRAM              | STUDENTS (AVERAGE ON BOARD) |
| 4302 | MEDICAL SERVICE CORPS FULL-TIME OUTSERVICE | STUDENTS (AVERAGE ON BOARD) |
| 4303 | MEDICAL CORPS FULL-TIME OUTSERVICE         | STUDENTS (AVERAGE ON BOARD) |
| 4304 | NURSE CORPS FULL-TIME OUTSERVICE           | STUDENTS (AVERAGE ON BOARD) |
| 4305 | DENTAL CORPS FULL-TIME OUTSERVICE          | STUDENTS (AVERAGE ON BOARD) |
| 4306 | ARMED FORCES SCHOLAR FORM                  | STUDENTS (AVERAGE ON BOARD) |
| 4307 | NURSE CORPS ANESTHESIA TRAINING, DIDACTIC  | STUDENTS (AVERAGE ON BOARD) |
| 4308 | RESERVE ALLIED MEDICAL PERSONNEL PRGM      | STUDENTS (AVERAGE ON BOARD) |
| 4402 | NUCLEAR SUBMARINE MEDICINE TECH TRAINING   | STUDENTS (AVERAGE ON BOARD) |
| 4406 | CLINICAL NUCLEAR MEDICINE TECH, PHASE I    | STUDENTS (AVERAGE ON BOARD) |
| 4407 | RADIATION HEALTH TECH TRAINING             | STUDENTS (AVERAGE ON BOARD) |
| 4408 | CARDIOPULMONARY TECH TRAINING              | STUDENTS (AVERAGE ON BOARD) |
| 4409 | OCCUPATIONAL THERAPY ASST., PHASE II       | STUDENTS (AVERAGE ON BOARD) |
| 4410 | UNDERSEA MEDICAL OFFICER COURSE            | STUDENTS (AVERAGE ON BOARD) |
| 4411 | OPTICIAN TRAINING                          | STUDENTS (AVERAGE ON BOARD) |
| 4413 | RADIATION HEALTH OFFICER COURSE            | STUDENTS (AVERAGE ON BOARD) |
| 4415 | RESPIRATORY TECH TRAINING                  | STUDENTS (AVERAGE ON BOARD) |
| 4416 | CLINICAL NUCLEAR MEDICINE TECH, PHASE II   | STUDENTS (AVERAGE ON BOARD) |
| 4417 | DENTAL OFFICER IN-SERVICE RESIDENCY        | STUDENTS (AVERAGE ON BOARD) |
| 4418 | UNDERSEA REFRESHER TRAINING                | STUDENTS (AVERAGE ON BOARD) |
| 4419 | RADIATION HEALTH INDOCTRINATION COURSE     | STUDENTS (AVERAGE ON BOARD) |
| 4425 | SURFACE FORCE INDEPENDENT DUTY TECH TRNG   | STUDENTS (AVERAGE ON BOARD) |
| 4432 | PREVENTIVE MEDICINE TECH TRAINING          | STUDENTS (AVERAGE ON BOARD) |
| 4434 | HEMODIALYSIS/APHERESIS TECH TRNG           | STUDENTS (AVERAGE ON BOARD) |
| 4445 | OCULAR TECHNICIAN TRAINING                 | STUDENTS (AVERAGE ON BOARD) |
| 4446 | OTOLARYNGOLOGY TECHNICIAN TRAINING         | STUDENTS (AVERAGE ON BOARD) |
| 4451 | BASIC X-RAY TECH TRAINING                  | STUDENTS (AVERAGE ON BOARD) |
| 4452 | ADVANCED X-RAY TECH TRAINING               | STUDENTS (AVERAGE ON BOARD) |
| 4453 | HISTOLOGY TECHNICIAN TRAINING              | STUDENTS (AVERAGE ON BOARD) |
| 4454 | ELECTRONEURODIAGNOSTIC TECH TRAINING       | STUDENTS (AVERAGE ON BOARD) |
| 4455 | CYTOLOGY TECHNICIAN TRAINING               | STUDENTS (AVERAGE ON BOARD) |
| 4456 | ADVANCED MED LAB TECH TRAINING             | STUDENTS (AVERAGE ON BOARD) |
| 4457 | ADVANCED DENTAL PROSTHETIC LAB TECH TRNG   | STUDENTS (AVERAGE ON BOARD) |
| 4465 | ADVANCE MED LAB TECH TRAINING, PHASE II    | STUDENTS (AVERAGE ON BOARD) |

# CA CAC DESCRIPTION WORK UNITS

|      |  |  |
|------|--|--|
| 4466 | PHYSICAL THERAPY TECHNICIAN TRNG                     | STUDENTS (AVERAGE ON BOARD)                |
| 4472 | BIOMEDICAL PHOTOGRAPHY TECH TRNG                     | STUDENTS (AVERAGE ON BOARD)                |
| 4473 | MED AND DEN ADMIN TECH TRAINING                      | STUDENTS (AVERAGE ON BOARD)                |
| 4474 | DENTAL EQUIPMENT REPAIR TECH TRAINING                | STUDENTS (AVERAGE ON BOARD)                |
| 4475 | BASIC DENTAL PROSTHETIC LAB TECH TRNG                | STUDENTS (AVERAGE ON BOARD)                |
| 4476 | MAXILLOFACIAL TECHNICIAN TRAINING                    | STUDENTS (AVERAGE ON BOARD)                |
| 4482 | PHARMACY TECHNICIAN TRAINING                         | STUDENTS (AVERAGE ON BOARD)                |
| 4483 | OPERATING ROOM TECHNICIAN TRAINING                   | STUDENTS (AVERAGE ON BOARD)                |
| 4485 | PSYCHIATRY TECHNICIAN, PHASE II TRAINING             | STUDENTS (AVERAGE ON BOARD)                |
| 4486 | UROLOGY TECHNICIAN TRAINING                          | STUDENTS (AVERAGE ON BOARD)                |
| 4488 | PHYSICIAN ASSISTANT TRAINING                         | STUDENTS (AVERAGE ON BOARD)                |
| 4494 | MED DEEP SEA DIVING INDEPEND DUTY TECH TRNG          | STUDENTS (AVERAGE ON BOARD)                |
| 4495 | DERMATOLOGY TECHNICIAN TRAINING                      | STUDENTS (AVERAGE ON BOARD)                |
| 4498 | NURSE CORPS ANESTHESIA TRAINING, CLINICAL            | STUDENTS (AVERAGE ON BOARD)                |
| 44HT | HISOPATHY TECHNICIAN TRAINING                        | STUDENTS (AVERAGE ON BOARD)                |
| 44OR | OPERATING ROOM TECH (Non-NEC) TRAINING               | STUDENTS (AVERAGE ON BOARD)                |
| 4631 | PHYSICAL THERAPY TRAINING                            | STUDENTS (AVERAGE ON BOARD)                |
| 4645 | EMERGENCY EGRESS REFRESHER & TRNG                    | STUDENTS (AVERAGE ON BOARD)                |
| 4649 | AEROSPACE MEDICINE FLIGHT SURGEON, OFCR TRNG         | STUDENTS (AVERAGE ON BOARD)                |
| 4650 | FLEET MARINE FORCE MEDICAL OFCR TRNG                 | STUDENTS (AVERAGE ON BOARD)                |
| 4651 | HEARING CONSERVATION TRNG & RECERTIFICATION          | STUDENTS (AVERAGE ON BOARD)                |
| 4652 | PEST MANAGEMENT TRAINING                             | STUDENTS (AVERAGE ON BOARD)                |
| 4653 | INDUSTRIAL HYGIENE TRAINING                          | STUDENTS (AVERAGE ON BOARD)                |
| 4654 | DENTAL OFFICER REVIEW COURSES FOR BOARD EXAM         | STUDENTS (AVERAGE ON BOARD)                |
| 4658 | EXECUTIVE TRAINING PROGRAM                           | STUDENTS (AVERAGE ON BOARD)                |
| 4659 | ALCOHOLISM ORIENTATION FOR HLTH CARE PROVIDER        | STUDENTS (AVERAGE ON BOARD)                |
| 4660 | SANITATION & FOOD SERVICE TRNG                       | STUDENTS (AVERAGE ON BOARD)                |
| 4661 | INFECTIOUS DISEASE CONTROL TRAINING                  | STUDENTS (AVERAGE ON BOARD)                |
| 4662 | ENTOMOLOGY TRAINING                                  | STUDENTS (AVERAGE ON BOARD)                |
| 4663 | FIELD MED/DEN TECHNICIAN TRAINING                    | STUDENTS (AVERAGE ON BOARD)                |
| 4EB1 | TRNG OH SUPPORT - LEVEL II (EDUC & TRNG ACTIVITIES)  | STUDENTS (AVERAGE ON BOARD)                |
| 4EB2 | TRNG OH SUPPORT - LEVEL III (EDUC & TRNG ACTIVITIES) | STUDENTS (AVERAGE ON BOARD)                |
| 4FBM | MEDICALLY RELATED SERVICES                           | SUM OF # OF REFERRALS AND # OF ACTIVE IEPs |
| 4FBB | PREVENTIVE MEDICINE                                  | SURVEYS/INSPECTIONS COMPLETED              |
| 4FBD | RADIATION HEALTH                                     | SURVEYS/INSPECTIONS COMPLETED              |

# WORK UNITS

## CAC DESCRIPTION

CA

|      |   |   |
|------|---|---|
| 4FBE | ENVIRONMENTAL HEALTH                    | SURVEYS/INSPECTIONS COMPLETED                 |
| 4FBF | EPIDEMIOLOGY                            | SURVEYS/INSPECTIONS COMPLETED                 |
| 7620 | HEATING, OVER 3,500,000 BTU/HR          | THOUSANDS OF BTU'S PER HOUR                   |
| 7630 | HEAT .75 TO 3.5 BTU                     | THOUSANDS OF BTU'S PER HOUR                   |
| 7640 | STEAM POWER                             | THOUSANDS OF BTU'S PER HOUR                   |
| 7680 | GAS MANUFACTURING PLANTS                | THOUSANDS OF BTU'S PER HOUR                   |
| 8790 | PNEUMATIC POWER                         | THOUSANDS OF CUBIC FEET                       |
| 87A0 | PNEUM POWER DISTR                       | THOUSANDS OF CUBIC FEET (KCFT)                |
| 9230 | REFUSE AND GARBAGE DISPOSAL             | THOUSANDS OF CUBIC YARDS                      |
| 7610 | NON POT WATER STOR FACILITIES           | THOUSANDS OF GALLONS PER DAY                  |
| 8410 | POTABLE WATER, PLANT                    | THOUSANDS OF GALLONS (KGAL)                   |
| 8420 | POT WATER, DISTR SYSTEMS                | THOUSANDS OF GALLONS (KGAL)                   |
| 8450 | PUR POTABLE WATER - COMMERCIAL          | THOUSANDS OF GALLONS (KGAL)                   |
| 8460 | PUR POTABLE WATER - NAVY                | THOUSANDS OF GALLONS (KGAL)                   |
| 8470 | PUR POTABLE WATER - OTHER               | THOUSANDS OF GALLONS (KGAL)                   |
| 8520 | SEWAGE DISTR SYSTEM                     | THOUSANDS OF GALLONS (KGAL)                   |
| 8550 | PUR SEWA TRET COMMERCIAL                | THOUSANDS OF GALLONS (KGAL)                   |
| 8560 | PUR SEWA TRET NAVACT                    | THOUSANDS OF GALLONS (KGAL)                   |
| 8570 | PUR SEWA TRET OTHER                     | THOUSANDS OF GALLONS (KGAL)                   |
| 8710 | NONPOT WATER SYS                        | THOUSANDS OF GALLONS (KGAL)                   |
| 8720 | NONPOT WATER DISTR                      | THOUSANDS OF GALLONS (KGAL)                   |
| 9210 | CUSTODIAL SERVICE                       | THOUSANDS OF SQ. FT. OF FLOOR AREA            |
| 8610 | PLANTS AC 5-25 TN                       | TONS CAPACITY                                 |
| 8620 | PLANTS AR 100 AND OVER                  | TONS CAPACITY                                 |
| 8630 | PLANTS AR 25-100 TN                     | TONS CAPACITY                                 |
| 8640 | DISTR SYS 100 OVER                      | TONS CAPACITY                                 |
| 8650 | DISTR SYS 25-100                        | TONS CAPACITY                                 |
| 8660 | PURCHASED AIR CONDITIONING              | TONS CAPACITY                                 |
| 4FB6 | MEDICAL SURVEILLANCE PROG               | TOTAL EXAMS                                   |
| 4EI2 | SUBSISTENCE                             | TOTAL MEAL DAYS SERVED                        |
| 4EIB | COMBINED FOOD OPERATIONS                | TOTAL MEAL DAYS SERVED                        |
| 4EIC | INPATIENT CLINICAL NUTRITION MANAGEMENT | TOTAL WEIGHTED INPATIENT NUTRITION PROCEDURES |
| 2120 | PACKING AND ISSUE                       | UNIT PACKS                                    |
| 99A1 | NAVY EXCHANGES                          | VOLUME OF SALES                               |
| 99B1 | NAVY CONSOLIDATED PACKAGE STORES        | VOLUME OF SALES                               |

|      |   |   |
|------|---|---|
| 99B3 | NAVY CIV CAF AND OTHER RESALE                 | VOLUME OF SALES                             |
| 99E1 | NAVY COMMISSIONED OFF MESS (OPEN)             | VOLUME OF SALES                             |
| 99E3 | NAVY CHIEF PETTY OFF MESS (OPEN)              | VOLUME OF SALES                             |
| 99E4 | NAVY PETTY OFCRS', ENL, AND CONSOL MESSSES    | VOLUME OF SALES                             |
| 4FAA | AREA REFERENCE LABS                           | WEIGHTED PROCEDURES                         |
| 4FAB | AREA DENTAL PROSTH LAB TYPE I                 | WEIGHTED DENTAL PROCEDURES                  |
| 4DA2 | HIV PHARMACY COSTS                            | WEIGHTED PROCEDURES                         |
| 4DAA | PHARMACY                                      | WEIGHTED PROCEDURES                         |
| 4DB1 | HIV LABORATORY TESTS                          | WEIGHTED PROCEDURES                         |
| 4DB2 | HIV WESTERN BLOT TESTS                        | WEIGHTED PROCEDURES                         |
| 4DB3 | HIV T-CELL TESTS                              | WEIGHTED PROCEDURES                         |
| 4DB4 | HIV LAB REAGENTS                              | WEIGHTED PROCEDURES                         |
| 4DBA | CLINICAL PATHOLOGY                            | WEIGHTED PROCEDURES                         |
| 4DBA | OCC HLTH CLINICAL PATHOLOGY                   | WEIGHTED PROCEDURES                         |
| 4DBB | ANATOMICAL PATHOLOGY                          | WEIGHTED PROCEDURES                         |
| 4DBC | BLOOD BANK                                    | WEIGHTED PROCEDURES                         |
| 4DBZ | OTHER PATHOLOGY SVCS NOT CLASSIFIED ELSEWHERE | WEIGHTED PROCEDURES                         |
| 4DC2 | HIV RADIOLOGY                                 | WEIGHTED PROCEDURES                         |
| 4DCA | DIAGNOSTIC RADIOLOGY                          | WEIGHTED PROCEDURES                         |
| 4DCB | THERAPEUTIC RADIOLOGY                         | WEIGHTED PROCEDURES                         |
| 4DCZ | OTHER RADIOLOGY SVC NOT CLASSIFIED ELSEWHERE  | WEIGHTED PROCEDURES                         |
| 4DDD | PULMONARY FUNCTION                            | WEIGHTED PROCEDURES                         |
| 4DDE | CARDIAC CATHETERIZATION                       | WEIGHTED PROCEDURES                         |
| 4DHA | INHALATION/RESPIRATORY THERAPY                | WEIGHTED PROCEDURES                         |
| 4DIA | NUCLEAR MEDICINE CLINIC                       | WEIGHTED PROCEDURES                         |
| 4EAC | DENTAL DEPRECIATION                           | \$ VALUE OF EQUIPMENT                       |
| 4EAD | SPECIAL PROGRAMS DEPRECIATION                 | \$ VALUE OF EQUIPMENT                       |
| 4EAE | MEDICAL READINESS DEPRECIATION                | \$ VALUE OF EQUIPMENT                       |
| 2830 | QUALITY ASSURANCE                             | \$ VALUE OF MATERIAL INSPECTED AND RELEASED |

Key: @ Changes for this fiscal year.

## APPENDIX D

| Expense<br>Element | Title  |
|--------------------|--|
| U                  | Personnel Comp & Benefits                        |
| 1                  | Readiness Labor (THCSSR)                         |
| C                  | Reserves Compensation                            |
| A                  | Military Compensation                            |
| E                  | Travel of Personnel                              |
| 8                  | Travel of Personnel (PCS)                        |
| F                  | Transportation of Things (Military Air Command)  |
| G                  | Transportation of Things (Commercial Air)        |
|                    | Transportation of Things (Mil Sealift Command)   |
| J                  | Transportation of Things (Inland Transportation) |
| K                  | Transportation of Things (QUICKTRANS)            |
| L                  | Transportation of Things (Other)                 |
| M                  | Purchased Utilities                              |
| N                  | Communications                                   |
| Y                  | Printing & Reproduction                          |
| D, P               | Purchase Maint Equipment                         |
| Q                  | Purchased Services, Other                        |
| V                  | Other POL (fuel)                                 |
| T                  | Medical/Dental Supplies                          |
| 4                  | Pharmaceutical Supplies                          |
| W                  | Other Equipment                                  |
| 5                  | Depreciation                                     |
| X                  | Other Expenses                                   |
| Z                  | Service Transfer, Funded                         |
| 6                  | Free Receipts                                    |





## PERFORMANCE

|                                       |  |        |
|---------------------------------------|--|--------|
|                                       | (METABOLISM) CLINIC                            |        |
|                                       | BAG GASTROENTEROLOGY CLINIC                    |        |
|                                       | BAH HEMATOLOGY CLINIC                          |        |
|                                       | BAI HYPERTENSION CLINIC                        |        |
|                                       | BAJ NEPHROLOGY CLINIC                          |        |
|                                       | BAK NEUROLOGY CLINIC                           |        |
|                                       | BAL NUTRITION CLINIC                           |        |
|                                       | BAM ONCOLOGY CLINIC                            |        |
|                                       | BAN PULMONARY DISEASE CLINIC                   |        |
|                                       | BAO RHEUMATOLOGY CLINIC                        |        |
|                                       | BAP DERMATOLOGY CLINIC                         |        |
|                                       | BAQ INFECTIOUS DISEASE CLINIC                  |        |
|                                       | BAR PHYSICAL MEDICINE                          |        |
| BB SURGICAL CARE                      | BBA GENERAL SURGERY CLINIC                     | VISITS |
|                                       | BBB CARDIOVASCULAR AND THORACIC SURGERY CLINIC |        |
|                                       | BBC NEUROSURGERY CLINIC                        |        |
|                                       | BBD OPHTHALMOLOGY CLINIC                       |        |
|                                       | BBE ORGAN TRANSPLANT CLINIC                    |        |
|                                       | BBF OTOLARYNGOLOGY CLINIC                      |        |
|                                       | BBG PLASTIC SURGERY CLINIC                     |        |
|                                       | BBH PROCTOLOGY CLINIC                          |        |
|                                       | BBI UROLOGY CLINIC                             |        |
|                                       | BBJ PEDIATRIC SURGERY CLINIC                   |        |
| BC OBSTETRICAL AND GYNECOLOGICAL CARE | BCA FAMILY PLANNING CLINIC                     | VISITS |
|                                       | BCB GYNECOLOGICAL CLINIC                       |        |
|                                       | BCC OBSTETRICS CLINIC                          |        |
|                                       | BCD BREAST CARE CLINIC                         |        |
| BD PEDIATRIC CARE                     | BDA PEDIATRIC CLINIC                           | VISITS |
|                                       | BDB ADOLESCENT CLINIC                          |        |
|                                       | BDC WELL BABY CLINIC                           |        |
| BE ORTHOPEDIC CARE                    | BEA ORTHOPEDICS CLINIC                         | VISITS |
|                                       | BEB CAST CLINIC                                |        |
|                                       | BEC HAND SURGERY CLINIC                        |        |
|                                       | BEE ORTHOTIC LABORATORY CLINIC                 |        |
|                                       | BEF PODIATRY CLINIC                            |        |
|                                       | BEZ ORTHOPEDIC CARE NOT ELSEWHERE CLASSIFIED   |        |
| BF PSYCHIATRIC CARE                   | BFA PSYCHIATRIC CLINIC                         | VISITS |
|                                       | BFB PSYCHOLOGY CLINIC                          |        |
|                                       | BFC CHILD GUIDANCE CLINIC                      |        |
|                                       | BFD MENTAL HEALTH CLINIC                       |        |
|                                       | BFE SOCIAL WORK CLINIC                         |        |
|                                       | BFF SUBSTANCE ABUSE REHABILITATION             |        |
| BG FAMILY PRACTICE CARE               | BGA FAMILY PRACTICE CLINIC                     | VISITS |
| BH PRIMARY MEDICAL CARE               | BHA PRIMARY CARE CLINICS                       | VISITS |
|                                       | BHB MEDICAL EXAMS CLINIC                       |        |
|                                       | BHC OPTOMETRY CLINIC                           |        |
|                                       | BHD AUDIOLOGY CLINIC                           |        |
|                                       | BHE SPEECH PATHOLOGY CLINIC                    |        |
|                                       | BHF COMMUNITY HEALTH CLINIC                    |        |
|                                       | BHG OCCUPATIONAL HEALTH CLINIC                 |        |
|                                       | BHH NAVCARE CLINIC                             |        |
|                                       | BHI IMMEDIATE CARE CLINIC                      |        |
| BI EMERGENCY                          | BIA EMERGENCY MEDICAL                          | VISITS |

|                      | MEDICAL CARE                               | CLINIC  |  |
|----------------------|--|---|--|
|                      | BJ FLIGHT MEDICINE CARE                    | BJA FLIGHT MEDICINE CLINIC  | VISITS   |
|                      | BK UNDERSEAS MEDICINE CARE                 | BKA UNDERSEAS MEDICINE CLINIC   | VISITS   |
|                      | BL REHABILITATION AMBULATORY SERVICES      | BLA PHYSICAL THERAPY CLINIC<br>BLB OCCUPATIONAL THERAPY CLINIC<br>BLC NEUROMUSCULOSKELETAL SCREENING CLINIC   | VISITS<br>VISITS<br>VISITS   |
| C.DENTAL CARE        | CA DENTAL SERVICES                         | CAA DENTAL CARE   | CTV'S AND CLV'S  |
|                      | CB DENTAL LABORATORY SERVICES              | CBA DENTAL LABORATORY   | CTV'S AND CLV'S  |
| D.ANCILLARY SERVICES | DA PHARMACY                                | DAA PHARMACY  | RAW & WTD PROCEDURES   |
|                      | DB PATHOLOGY                               | DBA CLINICAL PATHOLOGY<br>DBB ANATOMICAL PATHOLOGY<br>DBC BLOOD BANK  | RAW & WTD PROCEDURES   |
|                      | DC RADIOLOGY                               | DCA DIAGNOSTIC RADIOLOGY<br>DCB THERAPEUTIC RADIOLOGY   | RAW & WTD PROCEDURES   |
|                      | DD SPECIAL                                 | DDA ELECTROCARDIOGRAPHY<br>DDC ELECTROENCEPHALOGRAPHY<br>DDD ELECTRONEUROMYOGRAPHY<br>DDD PULMONARY FUNCTION<br>DDE CARDIAC CATHETERIZATION                     | PROCEDURES<br>PROCEDURES<br>PROCEDURES<br>WTD PROCEDURES<br>WTD PROCEDURES   |
|                      | DE CENTRAL STERILE SUPPLY/MATERIEL SERVICE | DEA CENTRAL STERILE SUPPLY<br>DEB CENTRAL MATERIEL SERVICE  | HRS OF SVC<br>COST OF SUPPLIES AND MINOR PLANT EQUIPMENT ISSUED  |
|                      | DF SURGICAL SERVICES                       | DFA ANESTHESIOLOGY<br>DFB SURGICAL SUITE<br>DFC POST ANESTHESIA CARE UNIT   | MINUTES OF SERVICE & NUMBER OF PATIENTS<br>MINUTES OF SERVICE & NUMBER OF CASES<br>MINUTES OF SERVICE & NUMBER OF PATIENTS                           |
|                      | DG SAME DAY SERVICE                        | DGA AMBULATORY PROCEDURE UNIT<br>DGB HEMODIALYSIS<br>DGC HYPERBARIC MEDICINE<br>DGD PERITONEAL DIALYSIS<br>DGE AMBULATORY NURSING SERVICES                      | MINUTES OF SERVICE & NUMBER OF PATIENTS<br>MINUTES OF SERVICE<br>MINUTES OF SERVICE<br>MINUTES OF SERVICE<br>MINUTES OF SERVICE & NUMBER OF PATIENTS |
|                      | DH REHABILITATIVE SERVICES                 | DHA INHALATION/RESPIRATORY THERAPY  | RAW & WTD PROCEDURES   |
|                      | DI NUCLEAR MEDICINE                        | DIA NUCLEAR MEDICINE  | RAW & WTD PROCEDURES   |
|                      | DJ INTENSIVE CARE                          | DJA MEDICAL INTENSIVE CARE<br>DJB SURGICAL INTENSIVE CARE<br>DJC CORONARY CARE UNIT<br>DJD NEONATAL INTENSIVE CARE<br>DJE PEDIATRIC INTENSIVE CARE              | HOURS OF SERVICE<br>HOURS OF SERVICE<br>HOURS OF SERVICE<br>HOURS OF SERVICE<br>HOURS OF SERVICE   |
| E.SUPPORT SERVICES   | EA DEPRECIATION                            | EAA INPATIENT DEPRECIATION<br>EAB AMBULATORY DEPRECIATION<br>EAC DENTAL DEPRECIATION<br>EAD SPECIAL PROGRAMS DEPRECIATION<br>EAE MEDICAL READINESS DEPRECIATION | OBJ<br>VISITS<br>\$ VALUE OF EQUIP<br>\$ VALUE OF EQUIP<br>\$ VALUE OF EQUIP   |
|                      | EB COMMAND                                 | EBA COMMAND   | FTEs   |

|   |  |  |
|---|--|--|
| MANAGEMENT AND<br>ADMINISTRATION  | EBB SPECIAL STAFF  | FTEs   |
|   | EBC ADMINISTRATION   | FTEs   |
|   | EBD CLINICAL MANAGEMENT                                    | FTEs   |
|   | EDE GRADUATE MEDICAL                                       | FTEs   |
|   | EDF EDUCATION AND  | FTEs   |
|   | TRAINING SUPPORT   |  |
|   | EBG PEACETIME EXERCISE/<br>DISASTER PREPAREDNESS           | FTEs   |
|   | EBH THIRD PARTY COLLECTION ADMINISTRATION                  | # OF CLAIMS BY<br>WORKCENTER                               |
| EC SUPPORT SERVICES<br>(NON-REIMBURSABLE/<br>FREE RECEIPTS)   | ECA PLANT MANAGEMENT                                       | SQ FT  |
|   | ECB OPERATION OF<br>UTILITIES                              | SQ FT  |
|   | ECC MAINTENANCE OF REAL<br>PROPERTY                        | SQ FT/HRS OF SVC   |
|   | ECD MINOR CONSTRUCTION                                     | HRS OF SVC   |
|   | ECE OTHER ENGINEERING SUPPORT                              | SQ FT  |
|   | ECF LEASE OF REAL PROPERTY                                 | SQ FT LEASED   |
|   | ECG TRANSPORTATION   | MILES DRIVEN   |
|   | ECH FIRE PROTECTION  | SQ FT  |
|   | ECI POLICE PROTECTION                                      | SQ FT  |
|   | ECJ COMMUNICATION  | FTEs   |
|   | ECK OTHER BASE SUPPORT<br>SERVICES                         | FTEs   |
| ED SUPPORT SERVICES<br>(FUNDED) /<br>REIMBURSABLE/<br>MTF-PROVIDED/<br>NON-MTF<br>PROVIDED<br>CONTRACTED) | EDA PLANT MANAGEMENT                                       | SQ FT  |
|   | EDB OPERATION OF<br>UTILITIES                              | SQ FT  |
|   | EDC MAINTENANCE OF REAL<br>PROPERTY                        | SQ FT/HRS OF SVC   |
|   | EDD MINOR CONSTRUCTION                                     | HRS OF SVC   |
|   | EDE OTHER ENGINEERING<br>SUPPORT                           | SQ FT  |
|   | EDF LEASE AND RENTAL OF<br>REAL PROPERTY AND<br>FACILITIES | SQ FT LEASED   |
|   | EDG TRANSPORTATION   | MILES DRIVEN   |
|   | EDH FIRE PROTECTION  | SQ FT  |
|   | EDI POLICE PROTECTION                                      | SQ FT  |
|   | EDJ COMMUNICATIONS   | FTEs   |
|   | EDK OTHER MTF SUPPORT                                      | FTEs   |
| EE MATERIAL SERVICE   | EEA MATERIAL MANAGEMENT                                    | COST OF SUPPLIES AND<br>SERVICES/PLANT EQUIPMENT<br>ISSUED |
| EF HOUSEKEEPING   | EFA HOUSEKEEPING - IN<br>HOUSE                             | SQ FT CLEANED  |
|   | EFB HOUSEKEEPING -<br>CONTRACT                             | SQ FT CLEANED  |
| EG BIOMEDICAL<br>REPAIR   | EGA BIOMEDICAL EQUIPMENT<br>REPAIR - IN HOUSE              | HRS OF SERVICE   |
|   | EGB BIOMEDICAL EQUIPMENT REPAIR - CONTRACT                 | HRS OF SERVICE   |
| EH LAUNDRY  | EHA LAUNDRY - IN HOUSE                                     | POUNDS PROCESSED   |
|   | EHB LAUNDRY - CONTRACT                                     | POUNDS PROCESSED   |
| EI DIETETICS  | EIA PATIENT FOOD OPERATIONS                                | PATIENT MEAL DAYS<br>SERVED                                |
|   | EIB COMBINED FOOD OPERATIONS                               | MEAL DAYS SERVED   |
|   | EIC INPATIENT CLINICAL NUTRITION<br>MANAGEMENT             | WEIGHTED INPATIENT<br>NUTRITION PROCEDURES                 |
| EJ INPATIENT AFFAIRS  | EJA INPATIENT AFFAIRS                                      | OBDS   |
| EK AMBULATORY CARE  | EKA AMBULATORY CARE<br>ADMINISTRATION                      | OUTPATIENT VISITS  |
| EL MTF TRICARE/<br>MANAGED CARE   | ELA TRICARE/MANAGED CARE                                   | FTEs   |
| SPECIAL PROGRAMS  | FA SPECIFIED HEALTH<br>RELATED PROGRAMS                    | WTD PROCEDURES<br>WTD PROCEDURES                           |
|   | FAA AREA REFERENCE LABS                                    |  |
|   | FAB AREA DENTAL PROSTHETIC LAB                             |  |

|                                     |   |  |
|-------------------------------------|---|--|
|                                     | FAC OPHTHALMIC<br>FABRICATION AND<br>REPAIR   | SPECTACLES FABRICATED<br>OR REPAIRED     |
|                                     | FAD DOD MILITARY BLOOD<br>PROGRAM   | N/A                                      |
|                                     | FAF DRUG SCREENING AND<br>TESTING PROGRAM   | MTD PROCEDURES                           |
|                                     | FAH CLINICAL<br>INVESTIGATION PROGRAM   | N/A                                      |
|                                     | FAI PHYSIOLOGY TNG SUPPORT PROGRAM  | N/A                                      |
|                                     | FAK STUDENT EXPENSES FOR<br>CLASSROOM AND OTHER<br>LEARNING EXPERIENCES   | N/A                                      |
|                                     | FAL EXTERNALLY SPONSORED<br>CONTINUING HEALTH<br>EDUCATION  | N/A                                      |
|                                     | FAZ SPECIFIED HEALTH<br>RELATED PROGRAMS NOT<br>ELSEWHERE CLASSIFIED  | N/A                                      |
| FB PUBLIC HEALTH                    | FBB PREVENTIVE MEDICINE   | N/A                                      |
|                                     | FBC INDUSTRIAL HYGIENE  | N/A                                      |
|                                     | FBD RADIATION HEALTH  | N/A                                      |
|                                     | FBE ENVIRONMENTAL HEALTH  | N/A                                      |
|                                     | FBF EPIDEMIOLOGY  | N/A                                      |
|                                     | FBI IMMUNIZATIONS   | IMMUNIZATIONS AND<br>SCREENING TESTS     |
|                                     | FBJ EARLY INTERVENTION SERVICES<br>(EFMP)   | INDIVIDUAL FAMILY<br>SERVICE PLANS (IFS) |
|                                     | FBK MEDICALLY RELATED SERVICES<br>(EFMP)  | INDIVIDUALIZED                           |
|                                     | FBL MULTIDISCIPLINARY TEAM<br>SERVICES  | EDUCATION PLANS (IEP)<br>PTEs            |
| FC HEALTH CARE<br>SERVICES SUPPORT  | FCA SUPPLEMENTAL CARE (Note: Only specific costs<br>PURCHASED FROM are charged to this<br>CIVILIAN SOURCES PCA account) | N/A                                      |
|                                     | FCB MILITARY/CIVILIAN<br>GUEST LECTURER AND<br>CONSULTANT PROGRAM   | N/A                                      |
|                                     | FCC CHAMPUS BENEFICIARY<br>SUPPORT  | N/A                                      |
|                                     | FCD SUPPORT TO OTHER<br>MILITARY ACTIVITIES   | N/A                                      |
|                                     | FCE SUPPORT TO OTHER<br>FEDERAL AGENCIES  | N/A                                      |
|                                     | FCF SUPPORT TO NON-<br>FEDERAL ACTIVITIES   | N/A                                      |
|                                     | FCG SUPPORT TO NON-MEPRS<br>REPORTING MEDICAL<br>ACTIVITIES   | N/A                                      |
|                                     | FCH A/D EMERGENCY & REMOTE CARE AREA  | N/A (ARMY AND AIR FORCE<br>ONLY)         |
| FD MILITARY UNIQUE                  | FDB BASE OPERATIONS -<br>MEDICAL INSTALLATIONS  | N/A                                      |
|                                     | FDC NONPATIENT FOOD OPERATIONS  | NONPATIENT MEAL DAYS<br>SERVED           |
|                                     | FDD DECEDENT AFFAIRS  | N/A                                      |
|                                     | FDE INITIAL OUTFITTING<br>CONSTRUCTION  | N/A                                      |
|                                     | FDG TDY/TAD ENROUTE TO<br>A PCS   | N/A                                      |
|                                     | FDI IN-PLACE CONSEC OVERSEAS TOUR (COT) LEAVE   | COT LEAVES FUNDED                        |
|                                     | FDH MILITARY FUNDED<br>EMERGENCY LEAVE  | NUMBER OF EMERGENCY<br>LEAVES PAID       |
|                                     | FDZ MILITARY UNIQUE<br>MEDICAL ACTIVITY NOT<br>ELSEWHERE CLASSIFIED   | N/A                                      |
| FE PATIENT MOVEMENT<br>AND MILITARY | FEA PATIENT TRANSPORTATION  | HRS OF SVC                               |
|                                     | FEC TRANSIENT PATIENT<br>CARE   | OBDs BY TRANSIENT<br>PATIENT             |
|                                     | FED MILITARY PATIENT  | N/A                                      |

|              |  |   |                                     |
|--------------|--|---|-------------------------------------|
|              |  | PERSONNEL ADMIN   |                                     |
|              |  | FEE MILITARY PATIENTS (SALARIES)  | N/A                                 |
|              |  | FEP AEROMEDICAL STAGING FACILITIES                                      | PATIENT MOVEMENTS                   |
|              | PF VETERINARY SERVICES                     | FFA DEPUTY COMMANDER FOR VETERINARY SERVICES                            | FTEs                                |
| G. READINESS | GA READINESS PLANNING AND ADMIN            | GAA DEPLOYMENT PLANNING AND ADMINISTRATION                              | FTEs                                |
|              |  | GAB OTHER READINESS PLANNING AND ADMINISTRATION                         | FTEs                                |
|              | GB READINESS EXERCISES                     | GBA FIELD OR FLEET READINESS EXERCISES                                  | FTEs                                |
|              |  | GBB OTHER READINESS EXERCISES   | FTEs                                |
|              | GC READINESS TRAINING                      | GCA READINESS TRAINING CONDUCTED LOCALLY                                | FTEs                                |
|              |  | GCB OTHER READINESS TRAINING  | FTEs                                |
|              | GD UNIT OR PERSONNEL DEPLOYMENTS           | GDA UNIT OR PERSONNEL DEPLOYMENTS                                       | FTEs                                |
|              | GE READINESS LOGISTICS MANAGEMENT          | GEA PREPOSITIONED WAR RESERVE   | \$ VALUE OF WRM MATERIAL MAINTAINED |
|              |  | GEB CONTINGENCY PATIENT CARE AREAS                                      | \$ VALUE OF MATERIEL MAINTAINED     |
|              |  | GEC CONTINGENCY BLOCKS/PACKS  | \$ VALUE OF MATERIEL MAINTAINED     |
|              | GF READINESS PHYSICAL TRAINING             | GFA READINESS PHYSICAL TRAINING   | FTEs                                |
|              |  |   | FTEs                                |
|              | GG NATIONAL DISASTER MEDICAL SYSTEM (NDMS) | GGA NATIONAL DISASTER MEDICAL SYSTEM (NDMS) PLANNING AND ADMINISTRATION | FTEs                                |
|              |  | GGB NATIONAL DISASTER MEDICAL SYSTEM (NDMS) EXERCISES                   | FTEs                                |

## APPENDIX F

### NAVAL MEDICAL CENTER, SAN DIEGO COST CENTERS/SUB COST CENTERS FY - 97

| Cost Center | SubCost Center | Name                                      |
|-------------|----------------|---|
| 01          | AA             | COM - Commander's Office                  |
| 01          | AB             | COM - Legal                               |
| 01          | AC             | COM - Public Affairs                      |
| 01          | AF             | COM - Fleet Med Liaison                   |
| 01          | AH             | COM - Patient Relations                   |
| 01          | AJ             | COM - Command Master Chief                |
| 01          | AW             | COM - Marine Liaison                      |
| 02          | AM             | DEPCOM - Managed Care                     |
| 02          | AN             | DEPCOM - Deputy Comm Office               |
| 02          | AP             | DEPCOM - Professional Affairs             |
| 02          | AS             | DEPCOM - Office of Continuous Improvement |
| 02          | AT             | DEPCOM - Medical Education Director       |
| 02          | AU             | DEPCOM - Graduate Education               |
| 02          | AV             | DEPCOM - CID                              |
| 03          | BA             | DFA - DFA's Office                        |
| 03          | BB             | ADO - ADO's Office                        |
| 03          | BF             | ADO - Operations Management               |
| 03          | BJ             | DFA - IRMD - BCC                          |
| 03          | BL             | DFA - MMAU                                |
| 03          | BM             | DFA - IRMD                                |
| 03          | BN             | DFA - IRMD - CHCS                         |
| 03          | BQ             | ADA - ADA's Office                        |
| 03          | BU             | ADA - Patient Administration              |
| 03          | BV             | ADA - Education & Training                |
| 03          | BX             | ADA - BEQ                                 |
| 03          | BZ             | ADA - Urinalysis                          |
| 04          | CB             | MED - DMS                                 |
| 04          | CC             | MED - Int Med Rt Crd                      |
| 04          | CD             | MED - Dermatology                         |
| 04          | CE             | MED - Critical Care                       |
| 04          | CF             | MED - Emergency Medicine                  |
| 04          | CG             | MED - Pediatrics & EFMP                   |
| 04          | CH             | MED - Psychiatry                          |
| 04          | CJ             | MED - Psychology                          |
| 04          | CK             | MED - Substance Abuse                     |
| 04          | CL             | MED - Social Work                         |
| 04          | CM             | MED - Family Advocacy                     |
| 04          | CN             | MED - Family Practice                     |
| 04          | HA             | DHP - DHP                                 |
| 04          | HB             | MED - Staff Sick Call                     |
| 04          | HC             | DHP - Health Promotion Program            |



**NAVAL MEDICAL CENTER, SAN DIEGO  
COST CENTERS/SUB COST CENTERS  
FY - 97**

| <b>Cost<br/>Center</b> | <b>SubCost<br/>Center</b> | <b>Name</b>                            |
|------------------------|---------------------------|--|
| 04                     | HD                        | DHP - Command Fitness Department       |
| 04                     | HE                        | DHP - DAPA                             |
| 04                     | HF                        | DHP - Health Education                 |
| 05                     | DB                        | SRG - DSS                              |
| 05                     | DC                        | SRG - General Surgery                  |
| 05                     | DE                        | SRG - Anesthesia                       |
| 05                     | DG                        | SRG - Neurology                        |
| 05                     | DH                        | SRG - Urology                          |
| 05                     | DJ                        | SRG - Dental                           |
| 05                     | DK                        | SRG - Obstetrics/Gynecology            |
| 05                     | DL                        | SRG - Ophthalmology                    |
| 05                     | DM                        | SRG - Orthopedics                      |
| 05                     | DN                        | SRG - Otorhinolaryngology              |
| 05                     | DQ                        | SRG - Optometry                        |
| 06                     | EF                        | ANC - Physical/Occupational Therapy    |
| 06                     | EG                        | ANC - Breast Health Center             |
| 06                     | EB                        | ANC - DAS                              |
| 06                     | EC                        | ANC - Pharmacy                         |
| 06                     | ED                        | ANC - Laboratory                       |
| 06                     | EE                        | ANC - Radiology                        |
| 06                     | EG                        | ANC - Breast Care Center               |
| 07                     | FA                        | NRS - Director                         |
| 07                     | FB                        | NRS - ADMACN                           |
| 07                     | FC                        | NRS - Gen Med                          |
| 07                     | FD                        | NRS - Med Spec                         |
| 07                     | FE                        | NRS - Mental Health                    |
| 07                     | FF                        | NRS - Emergency                        |
| 07                     | FG                        | NRS - Critical Care                    |
| 07                     | FK                        | NRS - ADOGPN                           |
| 07                     | FL                        | NRS - Pediatrics                       |
| 07                     | FM                        | NRS - Ambulatory Pediatrics            |
| 07                     | FN                        | NRS - Obstetrics/Gynecology            |
| 07                     | FP                        | NRS - Ambulatory Obstetrics/Gynecology |
| 07                     | FQ                        | NRS - ADSN                             |
| 07                     | FRA                       | NRS - Operating Room                   |
| 07                     | FS                        | NRS - PACU                             |
| 07                     | FT                        | NRS - Same Day Surgery                 |
| 07                     | FU                        | NRS - Uniform Allowance (Civilian)     |
| 07                     | FV                        | NRS- Orthopedics                       |
| 07                     | FW                        | NRS- General Surgery                   |
| 07                     | FX                        | NRS- Sub Specialty                     |

**NAVAL MEDICAL CENTER, SAN DIEGO  
COST CENTERS/SUB COST CENTERS  
FY - 97**

| <b>Cost<br/>Center</b> | <b>SubCost<br/>Center</b> | <b>Name</b>                    |
|------------------------|---------------------------|--------------------------------|
| 08                     | GA                        | DBC - Director                 |
| 08                     | GB                        | DBC - NORIS                    |
| 08                     | GC                        | DBC - NORIS-SCI                |
| 08                     | GD                        | DBC - El Centro                |
| 08                     | GE                        | DBC - NAVSTA                   |
| 08                     | GF                        | DBC - NTC                      |
| 08                     | GL                        | DBC - Miramar                  |
| 08                     | GM                        | DBC - MCRD                     |
| 08                     | GN                        | DBC - NAB Coronado             |
| 09                     | JW                        | DFA - Telcom                   |
| 10                     | RA                        | DOR - DOR's Office             |
| 10                     | RB                        | DOR - Fiscal                   |
| 10                     | RC                        | DOR - Resource Analysis        |
| 10                     | RD                        | DOR - Human Resource           |
| 11                     | BC                        | ADO - Materiel Management Dept |
| 11                     | BD                        | ADA - Nutrition Mgt            |
| 12                     | LA                        | Pastoral Care                  |
| 19                     | PF                        | DOHPM - Preventive Medicine    |
| 24                     | PA                        | DOHPM - Director               |
| 24                     | PB                        | DOHPM - Occupational Health    |
| 24                     | PB                        | DOHPM - Immunizations          |
| 24                     | PC                        | DOHPM - Indust Hygiene         |
| 24                     | PD                        | DOHPM - Audiology              |
| 24                     | PE                        | DOHPM - Occupational Medicine  |
| 24                     | PY                        | DOHPM - Safety                 |
| 29                     | BW                        | ADA - Medical Library          |
| 9A                     | BG                        | ADO - Facilities               |
| 9E                     | BT                        | ADO - Housekeeping             |
| 9M                     | BE                        | ADO - MWR Pool & Gym           |
| 9M                     | BP                        | ADA - MWR - Station Library    |
| 9M                     | BR                        | ADO - Fisher House             |
| 9M                     | BS                        | ADO - Child Care               |
| 9V                     | BH                        | ADO - Security                 |
| 9V                     | SB                        | ADO - Drug Test Program        |



## LIST OF REFERENCES

- Brimson, James A., Activity Accounting: An Activity-Based Costing Approach, 1991.
- BUMED brief for Acting Assistant Secretary of Defense (Health Affairs), 19 Aug 93.
- BUMEDINST 7301.1, Uniform Management Report (UMR) Guidance, 1993.
- CAPT Steven R. Lamar, Officer-in-Charge, Naval Healthcare Support Office,  
OCHAMPUS Detachment, DOD Health Care Reform: TRICARE, A Basic Program  
Overview, May 1994.
- CBO Study on Reforming the Military Health Care System, Jan 88.
- Chan, Yee-Ching Lilian, Improving Hospital Cost Accounting With Activity-Based  
Costing, Health Care Management Review, Winter 1993.
- Chief, BUMED, Subject: FY97 Supplemental Guidance for BUMED Activities,  
19 Sep 96.
- Cooper and Kaplan, Implementing Activity-Based Cost Management: Moving from analysis to  
Action, 1992.
- Cooper and Kaplan, Activity-Based System: Measuring the Costs of Resource Usage,  
Accounting Horizons, September 1992.
- Cuddy, John , Assistant Chief, Resource Management, BUMED, Memorandum for the  
Assistant Secretary of Defense (Health Affairs), Subject: Capitation-based Resource  
Allocation - Information Memorandum, 17 Aug 93.
- Euske, Kenneth J., Activity Based Costing, 1992.
- Interview with CAPT Rosciam, Director, Resource Management, NMCSO, Nov 1993.
- Interview with Ester White, Head, Program Analysis Division, NMCSO, Nov 1993.
- Martin, Charles, Director, Budget Division, BUMED, Navy Capitation Based Resource  
Allocation, 19 Aug 93.
- Martin, Charles, Director, Budget Division, BUMED, Capitation Allocation Methodology, 1994.

Martin, Charles, Director, Budget Division, BUMED, Capitation Budgeting Model,  
May 96.

Navy MEPRS User's Guide, 1996.

Office of the Assistant Secretary of Defense (Health Affairs), Memorandum for the Assistant  
Secretary of the Army, Navy and Air Force, Subject: FY94 Capitation Budgeting  
Implementation Procedures, 12 Apr 93.

Office of the Assistant Secretary of Defense (Health Affairs), Memorandum for the Secretary of  
the Army, Navy and Air Force, Subject: Preparing the Military Health Services System  
(MHSS) for Capitation-based Resource Allocation, 23 Jul 93.

Practical Comptrollership Manual, Naval Postgraduate School, Monterey, CA, Revised -  
February 1993.

Reischauer, Robert D., Director of the Congressional Budget Office, Statement before the  
Subcommittee on Military Forces and Personnel, Committee on Armed Services, House  
of Representatives, 10 May 93.

Rotch, William, Activity-Based Costing in Service Industries, Journal of Cost Management,  
Vol.4, No.2, Summer 1990.

Summary of DOD's Coordinated Care Proposal, 1 Sep 91.

Surgeon General of the Navy, Memorandum for the Assistant Secretary of Defense (Health  
Affairs), Subject: FY94 Capitation Budgeting Implementation Procedures - Information  
Memorandum, 14 Apr 93.

## INITIAL DISTRIBUTION LIST

|  | No. of Copies |
|--|---------------|
| 1. Defense Technical Information Center .....<br>8725 John J. Kingman Road, Suite 0944<br>Ft. Belvoir, VA 22060-6218 | 2             |
| 2. Dudley Knox Library .....<br>Naval Postgraduate School<br>411 Dyer Road<br>Monterey, CA 93943-5101                | 2             |
| 3. K. J. Euske .....<br>Naval Postgraduate School<br>Code-SMEE<br>Monterey, CA 93943-5101                            | 1             |
| 4. Jim Kerber .....<br>Naval Postgraduate School<br>Code-SMKE<br>Monterey, CA 93943-5101                             | 1             |
| 5. Ives C. Jones .....<br>1481 La Playa Avenue<br>San Diego, CA 92109  | 1             |